



Enabling poor rural people
to overcome poverty

PROJECT EVALUATION



Republic of Uganda

Vegetable Oil Development Project

Interim Evaluation

March 2011



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**Republic of Uganda
Vegetable Oil Development Project
Interim Evaluation**

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Photo on cover page:
Project beneficiary and her daughter separate sunflower seeds before drying them in the sun and pressing them for oil. "Before, we were just growing sesame, and that was for our use...the sunflower is for money. I bought two cows from last year's profits".

Source: IFAD photo by Robert Grossman

Republic of Uganda
Vegetable Oil Development Project
Loan No. 442-UG

Interim Evaluation

Table of Contents

Currency Equivalent	iii
Abbreviations and Acronyms	iii
Map of the Project Area	v
Foreword	vii
Acknowledgements	ix
Executive Summary	xi
Agreement at Completion Point	xxi
I. EVALUATION OBJECTIVES, METHODOLOGY AND PROCESSES	1
II. COUNTRY AND SECTOR BACKGROUND	3
III. PROJECT BACKGROUND	6
IV. IMPLEMENTATION RESULTS	10
A. Oil Palm Subproject	11
B. Traditional Oilseeds Subproject	18
C. Essential Oils Subproject	27
D. Note on Subsectoral Advocacy	27
E. Project Management, Coordination and Oversight	28
F. Project Costs and Compliance with Schedules	29
V. PROJECT PERFORMANCE	30
A. Relevance	30
B. Effectiveness	35
C. Efficiency	36
D. Overall Project Performance	40
VI. RURAL POVERTY IMPACT	40
A. Oil Palm Subproject	40
B. Traditional Oilseeds Subproject	45
C. Overall Rural Poverty Impact Ratings	50
D. Goal-level Impacts	50
VII. INNOVATION AND SUSTAINABILITY	53
A. Innovation, Replication and Scaling Up	53
B. Sustainability	54
VIII. PARTNER PERFORMANCE	57
IX. CONCLUSIONS AND RECOMMENDATIONS	60
A. Overall Project Achievements	60
B. Conclusions	60
C. Recommendations	64

APPENDICES

1. Project Structure	67
2. Data Sources	69
3. VODP Logical Frameworks	73
4. Summary of Implementation Results	85
5. Poverty Status of VODP Beneficiaries, all Subprojects	87
6. Goal-level Impacts	93
7. Profitability and Value Chain Efficiency	97
8. Evaluation Framework	105
9. Membership of the Core Learning Partnership	113
10. Mission Itinerary and Persons Met	115
11. Bibliography	123

BOXES

1. Uganda: Key Socio-economic and Poverty Statistics	3
2. Key Points – Project Performance	40
3. Increase in Socio-economic Position Among Sunflower Farmers	46
4. Increased Consumption of Vegetable Oil	48
5. Key Points – Rural Poverty Impact	52
6. Key Points – Innovation, Replication and Sustainability	56
7. Key Points – Performance of Partners	59

TABLES

1. Smallholder and Outgrower Registration and Planting, January 2009	16
2. Concentration of Extension Activities in Pilot Districts	25
3. Financial Performance by Financier by Subproject (US\$'000)	29
4. Land Use on Bugala Island, Kalangala, 2004-2010	43
5. Rural Poverty Impact Rating by Impact Domain and Overall	50
6. Summary of Project Performance and Impact	60

FIGURES

1. VODP Beneficiaries, 1998-2007	21
2. Area Planted with Sunflower and Seed Supply	22
3. VODP Extension Activities as Percentage of Peak Year	23
4. Sunflower Production: National and VODP	51

ANNEX (*)

1. PRA analysis of VODP impacts

(*) The annex is available from the IFAD Office of Evaluation (evaluation@ifad.org).

Currency Equivalent

Currency Unit = Ugandan Shilling (UGX)

US\$1.00 = UGX 2,100 (30 April 2010)

Abbreviations and Acronyms

ACP	Agreement at Completion Point
AfDB	African Development Bank
APEP	Agricultural Productivity Enhancement Programme
AWP/B	Annual workplan and budget
AT-U	Appropriate Technology Uganda, Limited
BIDCO	BIDCO Oil Refineries, Limited
CLP	core learning partnership
COREC	Coffee Research Centre
COSOP	country strategic opportunities paper
CPM	country programme manager
Danida	Danish International Development Agency
DAO	district agricultural office/officer
DLG	district local government
DRC	Democratic Republic of Congo
EIA	environmental impact assessment
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
ffb	fresh fruit bunch
IAS	impact assessment study
IDP	internally displaced people
IMS	impact monitoring system
IOE	IFAD Office of Evaluation
KDLG	Kalangala District Local Government
KOPGA	Kalangala Oil Palm Growers Association
KOPGT	Kalangala Oil Palm Growers Trust
LRA	Lord's Resistance Army
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
M&E	monitoring and evaluation
MFPEP	Ministry of Finance, Planning and Economic Development
MOU	memorandum of understanding
MTTI	Ministry of Tourism, Trade and Industry
MTR	mid-term review
NAADS	National Agricultural Advisory Services
NaCRRI	National Crop Resources Institute
NARO	National Agricultural Research Organization
NaSARRI	National Semi Arid Resources Research Institute
NEMA	National Environmental Management Authority
NUOMA	Northern Uganda Oil Millers' Association
OPUL	Oil Palm Uganda Limited
OPV	Open-pollinated variety (sunflower)
OSSUP	Oilseed Subsector Platform
PAF	Poverty Action Fund
PCO	project coordination office
PMA	Plan for the Modernization of Agriculture
PPM&E	Participatory planning, monitoring and evaluation
PPP	Public-Private Partnership
PRA	participatory rural appraisal
R&D	research and development
SNV	Netherlands Development Organization

UNFFE	Uganda National Farmers Federation
UNBS	Uganda National Bureau of Standards
UNOPS	United Nations Office for Project Services
UOSPA	Uganda Oil Seeds Producers and Processors Association
USAID	United States Agency for International Development
VODC	Vegetable Oil Development Council
VODF	Vegetable Oil Development Fund
VODP	Vegetable Oil Development Project

Foreword

The overall goal of the Vegetable Oil Development Project (VODP) is to increase household cash income of smallholders by revitalizing and increasing domestic vegetable oil production, in partnership with the private sector. The project is structured around three different subprojects: (i) introduction of commercial oil palm production on Bugala Island in Lake Victoria; (ii) development of traditional oilseeds in northern, eastern and mid-western districts of Uganda; and (iii) research and development (R&D) of essential oil crops piloted in a variety of districts. Total project costs were originally estimated at US\$60 million, consisting of an IFAD loan of US\$20 million, US\$33.1 million in cofinancing from the private-sector partner, and contributions of US\$3.8 million and US\$3.1 million from the Government and the beneficiaries, respectively. However, because of an increase in the scale of the oil palm subproject, the private investor and the Government increased their contributions to US\$120 million and US\$12 million, respectively, thereby bringing total project costs to about US\$156 million. The changes in private sector partner and the scale of the oil palm subproject had several implications and delayed project execution and resulted in an extension of the implementation period. The project is now scheduled to close in December 2011.

Achievements in the “traditional” oilseeds (mainly sunflower) component have been commendable. The project had a catalytic effect on sunflower production, with over 200,000 beneficiary families reached, an expansion in sunflower cultivation from 2,000 ha to 81,500 ha, and increased grain milling and processing. Five essential oil crops were tested and good economic potential established for citronella and lemongrass, although bottlenecks in transport, distilling and marketing will need to be removed to ensure scaling up and commercial marketing. Participating households in both traditional oilseed and essential oil production realized major improvements in their incomes and living standards.

While the potential for returns to farmers participating in oil palm development is high, achievements under the oil palm subproject will need to be assessed with caution as harvesting of fresh fruit bunches began only in late-2009. While the model (developing a nucleus estate and supporting outgrowers and smallholders) is innovative and supports an equitable relationship between smallholders and the private sector - with benefits to smallholder farmers expected to be substantial - very few of them are currently participating. The oil palm subproject got off to a delayed start, but the nucleus estate was established rapidly. The Kalangala Oil Palm Growers’ Trust (KOPGT) has provided loans, extension advice and other services to farmers. Smallholder and outgrower development of oil palm has been slower than anticipated, whereas the implementation of environmental protection measures for oil palm has been satisfactory. However, negative publicity and public concerns about the environment persist. The next project should address these issues from the outset and plan accordingly with a full social and environmental impact assessment, and a new environmental management plan with emphasis on communications.

An innovative, high-profile project, VODP represents one of the first large public-private partnership (PPP) in agribusiness for Uganda. Important lessons were derived from all three subprojects regarding the advantages and challenges of a PPP, the potential for replication and scaling up traditional smallholder development through a value-chain approach, and the challenges of developing niche markets for little-known crops. The project has had a catalytic effect in promoting sunflower cultivation and processing, which is evidenced not only by the large number of beneficiaries involved but also by the expansion in industrial milling and sales of vegetable oil.

VODP has benefited from a strong sense of ownership, support from high levels of government, and a successful private-sector partnership in oil palm development. The project has the potential to ensure the sustainability of both oil palm and oilseed production by farmers. A number of challenges remain, however, such as ensuring the long-term sustainability of KOPGT and the future of adaptive research in support of oilseed crops.

The present report includes an agreement at completion point summarizing the main findings of the evaluation. It sets out the recommendations that were discussed and agreed to by IFAD and the Government, together with proposals as to how and by whom the proposals should be implemented.



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Republic of Uganda
Vegetable Oil Development Project

Interim Evaluation

Executive Summary

I. INTRODUCTION

A. The Project

1. The Vegetable Oil Development Project (VODP) was approved by the IFAD Executive Board in April 1997; it has had a number of extensions and is now due to complete on 31 December 2011 and close on 30 June 2012. The overall objective of the project is to increase household cash income among smallholders by revitalizing and increasing domestic vegetable oil production in partnership with the private sector. The project has three very different subprojects: (i) the introduction of commercial oil palm production on Bugala Island in Lake Victoria (ii) the development of traditional oilseeds in northern, eastern and mid-western districts of Uganda, and (iii) research and development (R&D) of essential oil crops, piloted in a variety of districts.

2. Implementation of the Oil Palm Subproject has been affected by a number of delays, as a result of which oil palm planting on smallholder farms only began in 2006 and harvesting of fresh fruit bunches (ffbs) – the principle source of income for farmers – had not yet begun at the time of this Evaluation. In contrast, the other two subprojects have been going for eleven years.

3. Originally, the total project cost was to be US\$60 million, consisting of an IFAD loan of US\$20 million, US\$33.1 million of cofinancing from the private sector partner, US\$3.8 million from the Government of Uganda and US\$3.1 million from beneficiaries. However, due to an increase in the scale of the Oil Palm Subproject, the private investor and the Government increased their contributions to US\$120 million and US\$12 million respectively, bringing the total cost to about US\$156 million.

B. Objectives and Methodology of the Evaluation

4. **Objectives and process.** The interim evaluation was undertaken by the IFAD Office of Evaluation (IOE), as a standard procedure in preparation for a possible follow-up phase of the project. Its objectives were: (i) to assess the performance and impact of the project; and (ii) to generate a series of findings and recommendations to guide a second phase of the project. The main Evaluation Mission was conducted from 2 February to 4 March 2009. The team visited the oil palm project area on Bugala Island, Kalangala district and six districts where traditional vegetable oilseeds and essential oil crops are being grown.

5. **Methodology.** The evaluation follows new guidelines of IOE for project evaluations. It reports on implementation results and assesses project performance (relevance, effectiveness and efficiency); rural poverty impact (five impact domains); innovation and sustainability and the performance of implementing partners. Each of these evaluation criteria are rated on a six-point scale.¹

¹ The rating scale is as follows: 6 (highly satisfactory); 5 (satisfactory); 4 (moderately satisfactory); 3 (moderately unsatisfactory); 2 (unsatisfactory) and 1 (highly unsatisfactory).

6. The evaluation has drawn on project monitoring and evaluation (M&E) data, a Mid-Term Review, three Baseline Studies and one Impact Assessment Study. Two extra studies were commissioned in order to assess social impact in the traditional oilseeds area: a participatory rural appraisal (PRA) of household level impacts, and a macro-level analysis of poverty and vegetable oil consumption based on the Uganda National Household Survey data.

C. Country Background

7. The main background factors of relevance to the VODP project are: agriculture's diversity and changing role in the economy; its vulnerability to climatic shocks, insurgency and insecurity in parts of the project area, and the existence of a generally favourable policy environment. Uganda has achieved high rates of growth since the 1990s with large inflows of foreign direct investment and development assistance. Throughout this period, the policy environment has been stable and has favoured agricultural modernisation and poverty reduction. Particular emphasis has been placed on import-substituting subsectors such as vegetable oils.

8. Uganda's population is predominantly rural (87% in 2002) and agriculture provides their main source of livelihood. Ugandan agriculture is dominated by small scale farming – primarily food crops – and has become increasingly integrated into the market. Traditional export crops (coffee, cotton, tea, tobacco) have declined because of disease or fluctuating world prices, and are being replaced by non-traditional exports such as fish, maize and cut flowers.

9. There are large regional variations in the prospects for agricultural growth and poverty reduction in Uganda. The northern region, where VODP's work with traditional oilseeds has been focused, has less fertile soils, less rainfall and more erratic weather leading to recurrent drought and floods. In addition, the region has been affected by a twenty-year insurgency led by the Lord's Resistance Army (which has only recently subsided) and periodic banditry and cattle rustling by Karamojong herders in the north east. As a result of its impressive growth and strong pro poor policies, poverty declined from 56% in 1992 to 31% in 2005. However, poverty reduction has been much slower in the northern region.

II. PROJECT PERFORMANCE

A. Design Features

10. The project adopted a broad, value chain approach to the vegetable oil subsector that meant working with a variety of vegetable oil crops, stakeholders, institutional levels, and geographical areas. It required coordination with many public and private institutions at national, district and local levels.

11. The three subprojects have very different objectives, modes of implementation, geographic areas and supporting institutions. The oil palm subproject aims to establish a new industry from scratch with heavy dependence on a single private sector partner. It operates in a small geographic area, with new forms of land use and a plantation/smallholder mode of production. When fully implemented, it may reach 1,000 beneficiaries. The Traditional Oilseeds Subproject aims to expand smallholder production and processing of existing oilseed crops. It works in an extensive, agro-ecologically diverse region, with a variety of implementing partners, using traditional research/extension methods, and has more tenuous links to the private sector. It currently has over 200,000 beneficiaries. The Essential Oils Subproject aims to explore the potential for production of little known essential oils. It is a small-scale, experimental, and research-oriented initiative and is piloted in a variety of geographic areas. To date, there are some 1,000 beneficiaries.

12. There were major changes to the design of the Oil Palm Subproject following negotiations with the private investor (BIDCO/OPUL).² The main changes were that the nucleus estate was to be expanded from 1,000 ha to 6,500 ha, which together with the 3,500 ha intended for smallholders and outgrowers would give 10,000 ha of oil palm on the island instead of 4,500 ha. Second, the intention to use degazetted public land for the nucleus estate was dropped, so land had to be purchased from private owners. Third, the pace of subproject development was accelerated so that targets would be reached within four rather than eight years.

B. Project Implementation

13. **Factors affecting implementation results.** The main problems for the Oil Palm Subproject were a five-year delay in finalising negotiations with BIDCO and a further two-year delay in establishing the key institution for mobilising smallholder participation in the project, the Kalangala Oil Palm Growers Trust (KOPGT). In addition, the project encountered substantial public opposition arising from complaints about proposed tax concessions and concerns about the environmental effects of oil palm plantation on the island. A third factor was difficulty in acquiring sufficient land on the island for the expanded nucleus estate.

14. As far as the traditional oilseeds and essential oils subprojects are concerned, the main factors affecting implementation were exposure to insurgency, drought and floods. Latterly, the Traditional Oilseeds Subproject was also affected by the sub-division of the districts in 2005-06 and the re-organization of agricultural extension services, both of which debilitated the District Agricultural Offices (DAOs) – a key implementing partner for the project. The emergence of competing alternatives to the VODP-supported products and activities also undermined their attractiveness to farmers.

15. **Implementation results.** For the Oil Palm Subproject, the nucleus estate stood at 92% of the target establishment by early 2009. Some 6,000 ha of plantable land had been given to OPUL and 5,600 ha had been planted with oil palm. Plantation infrastructure and a workforce of about 1,500 were in place. The oil extraction mill on the island was still under construction. The refinery at Jinja was already operating on the basis of imported crude palm oil.

16. KOPGT became operational in June 2006 and has performed an important role in organising farmers' participation in the project, providing loans for plantation establishment and extension advice, and generally mediating the interests of the farmers, OPUL and the Government. However, the pace of smallholder mobilisation is far below target. Only 66% of the expected 3,500 ha has been registered and surveyed for planting and only 33% has been planted. In particular, the target for outgrowers is much below that of the smallholders.³

17. Due to the controversy surrounding the potential environmental impact of the oil palm subproject, a detailed environmental management plan was put in place and has been monitored closely. Oil palm research activities have taken place as planned but could have been better implemented. The Government complied with its commitments to provide or improve key public infrastructure, including a new ferry, which has greatly increased commercial activity on the island.

18. The Traditional Oilseeds Subproject was remarkably successful in promoting sunflower growing across a wide geographic area, which stimulated growth in input dealing and milling. The number of beneficiaries supported by VODP expanded from about 5,000 in 1998/99 to 206,000 in 2007/08,

² BIDCO (BIDCO Oil Refineries Ltd (Kenya) is the main project partner. Its subsidiary OPUL (Oil Palm Uganda Ltd. was created to manage the nucleus estate on Bugala Island).

³ Outgrowers land is managed in consolidated blocks by OPUL; smallholders grow and manage the oil palm plots on their own land, hence their plots are smaller and more scattered.

amongst whom 39% were women. Shortages of oilseeds were somewhat eased by the testing and release of new varieties by the research institutes and by the process of seed multiplication and distribution by the Uganda Oil Seeds Producers and Processors Association (UOSPA). Farmers' reluctance to grow sunflower because of concerns about reduced soil fertility and lack of market demand were overcome through general extension and support provided by the DAOs. The area planted with VODP support rose from some 2,000 ha in 1998/99 to 81,500 in 2007/08. Moreover, the yields per ha planted also increased.

19. Despite this impressive performance, the Evaluation has raised two concerns. First, seed shortage continues to be a problem, a situation that could have been affected by the project's initial policy of free seed distribution and slow progress by the research institutes with the development of local open-pollinated varieties of sunflower seed. Second, there appears to have been a decline in extension activity in recent years despite a continuing need for services, possibly because of institutional changes in the DAO offices.

20. Substantial progress was made in screening and identifying potential essential oil crops and piloting commercial development on farmers' land. The most successful crop was citronella, which is now grown, processed and sold by almost 800 farmers. However, bottlenecks emerged in the distilling and marketing processes that would impede large scale production at the present time.

C. Relevance, Effectiveness and Efficiency

21. **Relevance.** The project has high policy relevance to the Government of Uganda and IFAD, high relevance to the private sector (directly in the case of oil palm and indirectly in that of traditional oilseeds), and high relevance to the needs of the rural poor (especially in the poorer, war-torn northern region). The broad subsectoral approach raised the political and economic profile of the vegetable oil subsector and promoted knowledge synergies between the various subprojects. However, it implied a formidable task of coordination that might not have been possible had the Oil Palm Subproject not been delayed for many years. The task of planning, implementation and monitoring of the three subprojects would have been considerably eased with a clearer project structure and better specification of indicators and targets.

22. **Effectiveness.** The effectiveness of the Oil Palm Subproject has been greatest where it has been under the control of the private sector partner, i.e. on the nucleus estate and the refinery, but less effective in meeting the targets for smallholder and outgrower plantings. On the other hand, positive results have been obtained with regard to the establishment of KOPGT and the environmental monitoring system.

23. The Traditional Oilseeds Subproject has been remarkably effective, despite intermittent problems of insurgency and bad weather. The number of beneficiaries far exceeds the original target of 60,000 households and the increase in the area planted with sunflower has been spectacular, despite fluctuations during some years. The project realized significant achievements in all its outputs and it had a catalytic role in encouraging oilseed production, processing and milling by other actors. These achievements could have been even greater with more applied research on soil fertility and new sunflower varieties, more encouragement of private seed suppliers, and a more sustained and deepened extension effort in recent years. Notwithstanding these reservations, the effectiveness of this subproject is outstanding.

24. The Essential Oils Subproject achieved its aim of verifying the potential for a range of essential oil crops in terms of their oil content, yield, vulnerability to disease, agronomy and commercial prospects. The scope for expanding cultivation of some of these crops was identified provided that certain bottlenecks are addressed. The subproject has demonstrated that under the right conditions, some of these high value crops could offer impressive returns to farmers in poor agro-ecological conditions.

25. Overall, the outstanding performance of the Traditional Oilseeds Subproject outweighs the delayed effectiveness of the Oil Palm Subproject and the small-scale results of the Essential Oils Subproject.

26. **Efficiency.** The cost per beneficiary varies greatly between subprojects due to the different scale of the investment overheads, the implementation strategy adopted and the speed of beneficiary participation. The costs per beneficiary for the different subprojects are: US\$7,923 (oil palm), US\$37 (traditional oilseeds) and US\$575 (essential oils). In general, project efficiency has been affected by the delay in the Oil Palm Subproject, the splitting of the districts in the traditional oilseeds area and delays in procurement. However, these inefficiencies have been somewhat offset by the efficiency of the small project management unit.

III. PROJECT IMPACT

A. Rural Poverty Impact

27. **Oil Palm Subproject.** The anticipated impact on the incomes of participating farmers is yet to be realized since harvesting of the ffbs will only commence in later this year (2009). So far, the main impacts have consisted of changes in land use and the introduction of a new crop, farmers' improved land rights, access to KOPGT loans, and empowerment through their newly formed unit and block committees and membership of KOPGT. Nucleus estate workers have benefited from employment, wages, housing, subsidized food, free health care and social security.

28. There have been some wider indirect effects of the project – both positive and negative – although it is difficult to assess their extent. Moreover, they are the product of other changes which were already going on in the island due to the growth of fishing. Positive impacts have included an increase in population, improved transport, utilities, increased business, tourism and trade, better access to financial and government services, and increased investment in housing. Negative impacts include increased pressure on education and health services, reduced access to forest resources, increased road hazards, and anti-social behaviour associated with the nucleus estate workers. Overall, the positive impacts outweigh the negative ones but in any case, the effects seem to be small.

29. **Traditional Oilseeds Subproject.** The Traditional Oilseeds Subproject has had substantial rural poverty impact on all the impact domains. Farmers have been able to add to their household and farm assets and invest in human capital. Agricultural production and food security have improved and their capacity to manage their own economic affairs has improved through farmer organization. Environmental impacts are negligible in the short run. The various implementing partners are now giving vegetable oil crops higher priority. Other actors in the sunflower value chain have benefited indirectly, thereby improving overall market efficiency and linkage.

30. **Essential Oils Subproject.** Impacts on participating farmers are not expected to be widespread at this early stage of development. However, the citronella farmers have realized similar benefits to the oilseed farmers, with visible improvements in housing, farm investments and empowerment through local groups and links to broader producer organizations. There are, however, some concerns about the environmental impact of the distilleries.

31. **Goal level impacts.** The goals of the project were to increase: national production of vegetable oil crops (sunflower in particular), domestic vegetable oil consumption; import substitution of vegetable oils, and rural poverty reduction.⁴ The macro-analysis showed that there was a general increase in sunflower production during the project period and an increase in household consumption

⁴ Since there are many influences on these aggregate processes besides that of the VODP, it is not possible to attribute any changes to the project alone.

of cooking oil, particularly in the VODP districts. There was evidence of improvements in living standards in the VODP districts, but the poverty headcount figure (proportion of households below the poverty line) actually increased because of wider contextual factors such as adverse weather and insecurity. VODP's contribution to poverty reduction was therefore likely to have been quite locally-specific. Because of data deficiencies it was not possible to assess the extent of domestic demand, production and import substitution of vegetable oils in Uganda.

B. Innovation and Sustainability

32. **Innovation.** The Oil Palm Subproject is the first major PPP in Uganda and is also the first for IFAD. It has pioneered new forms of cooperation between the private sector, local and national government and farmer organizations. The PPP brought a major new investor to the country. Although the plantation mode of production is widely practiced in other countries, it is new to Uganda. The structure and functions of KOPGT are also very innovative, particularly the mechanisms for protecting farmers' interests vis-à-vis the nucleus estate.

33. The type of project intervention in the Traditional Oilseeds Subproject drew on tried and tested approaches to increasing agricultural production through improved seed supply, farmer extension and cottage processing. A particular innovation was the incorporation of a component on the development of food standards. Also novel – at least to Uganda – was situating these activities within a more integrated subsectoral approach. The subproject's main strength was in replicating and scaling up the approach to a large geographical area. Its ability to do this rested primarily on the strategy of working through local government structures that had the mandate, if not the resources, to cover a large number of districts. Further up scaling is now in the hands of the private sector.

34. The development of niche markets of high value essential oil crops for poor farmers was very innovative. There is little cultivation of essential oil crops in Uganda and most essential oils used by industry are imported. Specialised knowledge and contacts with international markets are only now being developed as a result of the project.

35. **Sustainability.** The overall sustainability of the Oil Palm Subproject depends on that of the private investor, on whom the harvesting, processing and eventual sale of the palm oil depends. Its commitment and sustainability are underpinned by the heavy financial investment so far incurred (some US\$75 million), supported by well-functioning forward market linkages already established on the basis of the sale of refined (imported) crude palm oil. The sustainability of outgrower and smallholder participation in the project will hinge on the level of benefits realized through the ffb harvests and there is every prospect that the harvests will be successful. However, their participation will also require continued extension advice to smallholders and improved trust and cooperation between outgrowers and OPUL. The sustainability of the subproject also depends on a continued future for KOPGT, which is currently not financially sustainable without donor funding.

36. The sustainability of the Traditional Oilseed Subproject's main output – sunflower production – hinges on the efficiency of the value chain, which will ensure a continuing demand for the product at reasonable levels of profitability for all stakeholders. These efficiencies have improved during the project period, not least because of the increased output from farmers, although some weaknesses remain. Nevertheless, sunflower production is likely to be sustainable into the medium term. In the longer term, however, declining soil fertility may threaten its sustainability.

37. The sustainability of the work on essential oil crops depends on converting the knowledge generated by the research into commercial opportunities for farmers. Crops such as citronella are suitable for development and the farmers are keen to pursue these opportunities. However, the distilling process does not appear to be environmentally sustainable and although a potential market has been identified, regular orders have not yet been established. Currently the subproject depends on a single implementing partner, whose funding is totally reliant on external funding and is precarious.

38. In general, the actual or potential benefits from traditional oilseeds and oil palm are sustainable. However, there are doubts about the financial sustainability of KOPGT on which the sustainability of smallholder oil palm production will still depend in the short run. There are also doubts about the long run sustainability of sunflower production, and the R&D of essential oil crops is not currently sustainable without external funding.

IV. PARTNER PERFORMANCE

39. **IFAD.** IFAD's performance in developing and supporting the project, especially during the difficult times, was highly appreciated by the Government. IFAD helped to strengthen the pro poor focus of the project at various stages in its development; it strengthened project implementation through increased involvement in the supervision process and by providing extra staff training on gender mainstreaming and M&E. The project has also benefited from in-country support from the IFAD Field Presence Officer.

40. **Government of Uganda.** There is strong ownership of and commitment to the project at all levels of government, especially for the Oil Palm Subproject. Despite the opposition of vested interests and adverse publicity, senior officials have played a major role in pushing the project forward. The performance of the PCO has been highly commendable given the task of coordinating three subprojects with a small staff. However, the Government procedures have caused delays in project implementation and procurement, which reduced its overall effectiveness and efficiency.

41. **Cooperating institutions.** The World Bank was strongly involved in the design of the project and was cooperating institution from the start until August 2004.⁵ It played a key role in facilitating negotiations between the Government and the private investor. UNOPS took over in September 2004 and fulfilled its supervisory role effectively. Both institutions made important contributions to project supervision, although they focused primarily on the Oil Palm Subproject and gave very little attention to the Essential Oils Subproject.

42. **Private sector partner (BIDCO, OPUL).** The private sector partner has demonstrated high commitment to the realisation of the Oil Palm Subproject and extraordinary patience with the Government over the negotiation of the agreement and the slow pace of land acquisition. Its commitment is reflected in the size of the investment to date and the speed of its implementation. On Bugala Island, OPUL has shown flexibility in adjusting to local conditions and has developed excellent relations with KOPGT and the local government.

V. CONCLUSIONS AND RECOMMENDATIONS⁶

A. Conclusions

43. VODP is a high profile project because of the novelty of the PPP, the extent of leveraged private sector financing, and the political controversies involved with the oil palm sub project. It is a highly innovative project which provides important lessons from all three subprojects regarding: the advantages and challenges of a PPP (oil palm); the potential for replication and scaling up traditional smallholder development through a value chain approach (oilseeds); and the challenges of developing niche markets for little known crops (essential oils). The project has had a synergistic effect in

⁵ The World Bank withdrew as cooperating institution because it feared that the expanded oil palm project would not comply with its internal forestry safeguards policies.

⁶ These conclusions and recommendations are a summary of the main conclusions and recommendations found in the full report.

promoting sunflower cultivation and processing, which is evidenced not only by the large number of beneficiaries involved but also by the expansion in industrial milling and sales of vegetable oil.

44. At this point it is difficult to assess the achievements in the oil palm sub sector due to the long delays in start up. Thus, the potential achievements in the Oil Palm Subproject need to be assessed cautiously as they are still to be realized. While the model is innovative and supports an equitable relationship between smallholder and the private sector and the benefits to smallholder farmers are expected to be substantial, only a small number of them are currently participating. Knowledge about the requirements for developing niche markets in essential oils has grown considerably, but the impact on farmers is still small. Despite the many challenges faced and the underestimation and poor management of project risks (related to land and the environment), the level of commitment to the project by sponsors, investors, managers and implementers is strong. There has been strong cooperation and partnership in all subprojects and at all levels.

45. **Oil palm.** The Oil Palm Subproject is now well underway and the private investor has proved to be an exceptionally good partner. The nucleus estate is 92 per cent established and the first harvests of ffbs on the nucleus estate and smallholder/outgrower land are expected by early 2010. The low participation of outgrowers and smallholders remains a concern, but the expectation is that the numbers will increase once farmers realise cash benefits from the harvest. With two years of harvesting before project completion, it is possible that the target numbers of smallholders and outgrowers will be achieved. The decision to expand the nucleus estate six-fold had serious implications for its implementation. It affected the pace and cost of implementation and provoked public concerns about possible effects on the environment. These concerns provided fodder for vested interests opposed to the project, which in turn undermined potential support amongst landowners and farmers on the island. With the benefit of hindsight, the project should have explored the implications of the nucleus estate expansion earlier and in greater depth, anticipated potential land shortages and concerns by environmentalists, and proactively addressed these problems.

46. **KOPGT.** Starting from scratch, KOPGT has developed into an effective organization, providing a range of services including farmer organization, extension and loan administration. The current system is working well, with mutually reinforcing links between farmer organization, extension and credit. The financing system has been adapted to the special circumstances on the island and seems to be working well. It remains to be seen whether these loans can be recovered efficiently and the situation will need to be closely monitored after the first harvest. KOPGT will need to ensure that its accounting system can record all transactions in real time and provide individual accounting to farmers. In the short term there is a need to consolidate the gains made in establishing KOPGT and to further strengthen it. In particular, KOPGT, as a multifunctional organization will need to expand its learning, and improve its agronomic technical skills to help farmers. In addition, KOPGT will need to do this without increasing its overall cost, thus improving its operational efficiency. However, the main remaining concern is its financial sustainability, which needs to be addressed urgently.

47. **Traditional oilseeds.** There has been strong achievement with traditional oilseeds particularly given the difficulties faced due to insurgency and intemperate weather in the project area. Performance could have been even better with some small improvements. The research stations could have released improved sunflower open pollinated varieties earlier and the link between the research stations, on-farm trials and the extension work could have been stronger; the phasing out of free seed and collaboration with private seed suppliers could have been introduced earlier; higher-output oil pressing machines could have been sourced to maintain interest in cottage processing; and the extension work could have been deepened with more attention to soil fertility as well as broadened as the project progressed.

48. The two main lessons from this subproject are: First an integrated value chain approach – even if only partially integrated as in this case – increases the effectiveness of any one part of the chain as well as the overall set of linkages, thereby increasing profitability to all the actors. The improvements

in seed distribution and the opportunities for value addition encouraged farmers to increase their area under sunflower, which in turn stimulated more traders and millers to enter the subsector and improved market conditions generally. Second, working through the DAOs enormously scaled up project implementation and increased the number of beneficiaries. Working through UOSPA facilitated linkages to other private sector operators, especially the millers.

49. The NARO research institutes have fulfilled their obligations under the memorandum of understanding, but have had some challenges. The main problems were lack of sufficient financial and human resources, weak staff capacity and the low priority given to vegetable oil crops. The lesson here is that financial injections into weak research institutions are unlikely to be sustainable without assured future funding. The performance of UNBS in developing food standards for vegetable oilseeds and promoting awareness of the importance of these standards amongst producers and processors is commendable. UNBS would benefit from further resources to strengthen its work on inspection and compliance.

50. **Subsectoral advocacy.** The role envisaged for VODC in supporting the subsector outside of VODP was enlightened, if premature at the time, but raised conflicts of interest. This role has largely been taken over by OSSUP. The latter organization has wider representation than VODC and draws on considerable enthusiasm and energy from its participants. It is working towards defined objectives and targets, and is developing priorities for advocacy and policy dialogue.

51. **Essential oils.** Considerable advances were made in the R&D of different essential oil crops – which was the major objective of the project – but the piloting of processing and marketing of these crops showed that there are bottlenecks in the value chain that would need to be overcome before any commercial development could take place. Apparently there are opportunities for essential oil production in Uganda; there is a demand from industrialists (depending on quality, price, volume and regularity of supply etc.); and these high value crops could offer good returns for farmers in areas where there are few other alternatives. The main lessons from this subproject are that while R&D of new agricultural crops is necessary, it is expensive, and once trials have been undertaken on farmers' land it is difficult to manage their expectations regarding further development. Before launching into larger scale production it is important to research the downstream linkages in order to ensure that the potential profitability of the crop can be realized. However, such market research requires specific competences and dedicated resources, and cannot be grafted on to the existing responsibilities of researchers or project staff.

B. Recommendations

52. **Follow on project.** It is recommended that IFAD and the Government proceed with a follow on project. Based on the above findings, the evaluation has the following recommendations for consideration when designing the follow on project:

53. **Oil palm.** A second phase should continue and extend the partnership with OPUL through the replication of the nucleus estate and smallholder oil palm model on Buvuma Island, and continued consolidation and expansion in Kalangala District to some outlying islands. The lessons learned from the current phase about the commercial potential for vegetable oil, the importance of adequate opportunities for securing land, effective environmental management and addressing farmers' incentives and constraints should be incorporated into the design of the second phase. This should include a full social and environmental impact assessment, a new environmental management plan with emphasis on communications, and activities to promote livelihood enhancement in the oil palm communities.

54. **KOPGT.** The Government of Uganda and IFAD should give priority to ensuring the long term financial sustainability of KOPGT by 2016. The Trust should be fully assessed by type of task in order to ensure full cost recovery for services provided as well as the sustainability of financing operations.

A medium term plan should be developed to indicate the long term scope of extension and financial services and how these can be provided on a sustainable basis. The plan should clarify the relationship between KOPGT and the Kalangala oil palm growers association.

55. **Traditional oilseeds.** IFAD and the Government of Uganda should consider carefully the need for a second phase. Its focus should be on helping smallholder farmers to supply crushing material (both sunflower and soybean) to millers. The programme should address concerns about declining soil fertility and farmer training should be provided in the use of fertilizers and other agro-chemicals, conservation agriculture and other related activities. There should be support for mechanization and value addition activities, as well as post harvest handling and group marketing. IFAD and the Government should continue to support the development of food standards and codes of practice for the vegetable oils subsector through UNBS. In the second phase, there should be a stronger focus on promoting direct commercial relations between farmers and private sector actors to promote the long term sustainability of oilseeds development. If IFAD and the Government consider that it is necessary to expand this component into the ex-lords resistance army areas further north because of the extent of poverty and the opportunities for successful development of oilseed production, the follow-on project should take account of the need for special skills in post-conflict work and coordination with other donors and NGOs working in this region.

56. **Subsectoral advocacy.** IFAD/Government of Uganda should build upon the experience being developed by OSSUP so that it can expand its work in promoting information exchange and coordination amongst the different value chain actors, and developing policy dialogue to promote the subsector. IFAD should provide a grant to Netherlands development organization to support OSSUP. Through this support, OSSUP should be able to maintain and expand an institutional and knowledge management framework that is capable of promoting the sustainable development of Uganda's vegetable oils subsector.

57. **Essential oils.** IFAD and the Government of Uganda should support the further development of speciality and niche market essential oils in order to realize value from the research investments made to date. The programme should work with all stakeholders in the value chain to support the creation of commercially viable business opportunities and the development of market linkages. A comprehensive value chain analysis could be undertaken, focusing on bottlenecks in distilling and marketing and the mitigation of environmental damage arising from fuel wood use in distilling. A greater range of implementing partners could be involved, including private organizations or NGOs with expertise in industrial processing and marketing. Such support could be made through a stand-alone grant financed by IFAD to the organizations identified to put this activity on a sustainable basis.

Republic of Uganda
Vegetable Oil Development Project
Interim Evaluation

Agreement at Completion Point

I. THE CORE LEARNING PARTNERSHIP AND EVALUATION STAKEHOLDERS

1. In 2009, the IFAD Office of Evaluation (IOE) conducted an interim evaluation of the IFAD-funded Vegetable Oil Development Project (VODP) in Uganda. In line with the IFAD Evaluation Policy, this interim evaluation was undertaken as a standard procedure in preparation for a possible follow-up phase of the project. The main objectives of the evaluation were: (i) to assess the performance and impact of the project; and (ii) to generate a series of findings and recommendations to guide a second phase of the project.

2. A core learning partnership (CLP) was established comprising IFAD and Government stakeholders to assist in the evaluation process and to maximise the opportunities for learning from the evaluation. Feedback gained from the CLP during the preparatory mission in November 2008 was incorporated in the evaluation Approach Paper. The main evaluation mission was conducted in February/March 2009. A final evaluation workshop was organized in December 2009 to discuss the evaluation findings and capture inputs for the Agreement at Completion Point (ACP). This ACP sets out understandings between IFAD and the Government of Uganda of the evaluation findings and recommendations, and their proposals to implement them within specific time frames.

II. MAIN EVALUATION FINDINGS

3. VODP has three different components:¹ (i) the introduction of commercial oil palm production on Bugala Island, Kalangala District; (ii) the development of traditional oilseeds in 23 northern, eastern and mid-western districts of Uganda using existing public extension; and (iii) institutional support for Research and Development (R&D) of oilseed crops including essential oils, farmer groups and associations and project coordination. The three subcomponents differ in their scale, time span, geographic areas, modes of implementation and partner institutions involved, making the project complex.

4. Overall, VODP is a successful project, with commendable achievements in the “traditional” oilseeds (mainly sunflower) component and good though delayed achievements in the high potential oil palm component. The Essential Oils Subproject has also achieved its objectives, although it does not have the commercial potential that the other vegetable oil activities have. The project had a catalytic effect on sunflower production with over 200,000 beneficiary families reached, an expansion in sunflower cultivation from 2,000 hectares in 1989 to 81,500 hectares in 2008, and an increase in grain milling and processing. Five essential oil crops were tested and good economic potential established for citronella and lemongrass, although bottlenecks in transport, distilling, and marketing need to be addressed in the future if there is to be scaling up and commercial marketing. Participating households in both traditional oilseed and essential oil production realized major improvements in their incomes and living standards. The Oil Palm Subproject had a delayed start, but the nucleus estate

¹ In this ACP, the term "component" is used for consistency with the terminology used in the original design and follow-on project (VODP2). It should be noted that the VODP evaluation assessed the project based on the three sub-sectors supported by the project namely oil palm, oilseeds, and essential oils (see VODP evaluation report para 29).

was rapidly established. The Kalangala Oil Palm Growers Trust (KOPGT) has successfully provided loans, extension advice and other services to farmers. The implementation of the smallholder and outgrower development of oil palm has been slower than anticipated. Implementation of environmental protection measures for oil palm has been good and there has been compliance with environmental monitoring. Proactive outreach, communication and dialogue on the environment with concerned groups could have been greater as their issues were already known. The potential returns to farmers participating in oil palm development are high, and will be realized once the harvesting of fresh fruit bunches begins, five years after initial planting.

5. VODP has benefited from relatively good management, strong ownership and support from high levels of government and a successful private-sector partnership in oil palm development. It is an innovative project and has already achieved or has the potential to achieve sustainability for both oil palm and oilseed production by farmers. Both components have faced external constraints that were largely beyond project control, although some (such as subdivision of the districts and re-organization of the extension system) were an effect of government policy. There are a number of remaining challenges, related to ensuring the long term financial sustainability of KOPGT, the future of adaptive research in support of oilseed crops, and the provision of extension for oilseed farmers on a longer-term self-sustaining basis.

6. The project has high relevance to the major stakeholders – Government, the private sector and the rural poor. The relevance of design to objectives was undermined by an awkward project structure and an inadequate logframe, with unclearly specified indicators and targets, which created difficulties for Monitoring and Evaluation (M&E) and for financial reporting, which might have been addressed by more dynamic management by the project. The effectiveness and impact of the three components varied greatly due to their different timeframes and scales of operation. While the Traditional Oilseeds and Essential Oils Subprojects have been implemented for over ten years, the principal benefits from the Oil Palm Subproject are yet to be realized. The successes with the traditional oilseeds were offset by the limited scale of impact in oil palm (due to delay) and essential oils (due to its very small size). In terms of efficiency, the project benefited from a relatively efficient project coordination unit but was undermined by delays in follow-up with regard to procurement, particularly the delay in contracting the private-sector partner. Project costs per beneficiary varied greatly between the three subprojects.

III. RECOMMENDATIONS AGREED UPON BY ALL PARTNERS

7. The below evaluation report recommendations are deemed acceptable and feasible by the Government of Uganda (GOU) and IFAD, and will be implemented in a second phase.

8. **Oil palm.** A second phase will continue and extend the partnership with Oil Palm Uganda Limited (OPUL) through the replication of the nucleus estate and smallholder oil palm model on Buvuma Island, and continued consolidation and expansion in Kalangala District to some outlying islands. In addition, efforts to identify new areas for future oil palm production will be continued through oil palm research trials. The lessons learned from the current phase about the commercial potential for vegetable oil, the importance of adequate opportunities for securing land, effective environmental management and addressing farmers' incentives and constraints have been incorporated into the design of the second phase. These will be addressed through a full social and environmental impact assessment, a new environmental management plan with emphasis on communications, and activities to promote livelihood enhancement in the oil palm communities.

Partners involved in implementing the recommendation: GOU, IFAD, OPUL

Timeframe: During the design and implementation of the Vegetable Oil Development Project, Phase 2 (VODP2)

9. **KOPGT.** GOU and IFAD will give priority to ensuring the long term financial sustainability of KOPGT by 2016. The Trust will be fully assessed by type of task in order to ensure full cost recovery for services provided as well as the sustainability of financing operations. A medium term plan will be developed to indicate the long term scope of extension and financial services and how these can be provided on a sustainable basis. The plan will clarify the relationship between KOPGT and the Kalangala Oil Palm Growers Association (KOPGA).

Partners involved in implementing the recommendation: GOU, IFAD, KOPGT, KOPGA

Timeframe: Starting during the remaining implementation period of VODP and being completed during early implementation of the VODP2

10. **Traditional oilseeds.** IFAD and GOU have considered carefully the need for a second phase and decided that the focus should be on helping smallholder farmers to supply crushing material (both sunflower and soyabean) to millers. The programme will address concerns about declining soil fertility and farmer training will be provided in the use of fertilizers and other agro-chemicals, conservation agriculture and other related activities. There will be support for mechanization and value addition activities, as well as post harvest handling and group marketing. IFAD and GOU will continue to support the development of food standards and codes of practice for the vegetable oils subsector through Uganda National Bureau of Standards (UNBS). In the second phase, there will be a stronger focus on promoting direct commercial relations between farmers and private sector actors, such as extension providers and processors, to promote the long term sustainability of oilseeds development. IFAD and GOU consider that oilseeds development offer good potential for livelihoods improvement, and this component will be expanded into areas further north (where the ex-Lords Resistance Army (LRA) has been operating). The follow-on project will take account of the need for special skills in post-conflict work and coordination with other donors and NGOs working in this region.

Partners involved in implementing the recommendation: GOU, IFAD, and private sector processors contracted on a cost-sharing basis

Timeframe: During the design and implementation of the VODP2

11. **Subsectoral advocacy.** IFAD/GOU will build upon the experience being developed by the Oilseed Sub Sector Platform (OSSUP) so that it can expand its work in promoting information exchange and coordination amongst the different value chain actors, and developing policy dialogue to promote the subsector. IFAD will provide a grant to Netherlands Development Organization (SNV) to support OSSUP. Through this support, OSSUP will be able to play a critical role in promoting public/private partnerships for a range of activities to support oilseeds development (with millers, seed companies, banks for inputs and stock financing and farmers groups for bulking). Drawing upon the experience and learning gained, OSSUP will support the institutional and sub sector knowledge management frameworks that are necessary for promoting the sustainable development of Uganda's vegetable oils subsector.

Partners involved in implementing the recommendation: GOU, IFAD, SNV

Timeframe: Within the context of the design of the VODP2

12. **Essential oils (i.e. Citronella).** IFAD and GOU recognize that large scale public investment should be directed to commercial oilseeds such as sunflower, soybeans, groundnuts and sesame. Citronella is produced in limited quantities and remains a niche crop and it is unlikely to receive significant public investment. There is need for the GOU to identify partners, either NGOs or a private sector operator to carry on the Citronella work. Once a viable partner is identified IFAD will provide modest grant financing to support this endeavour.

Partners involved in implementing the recommendation: GOU, IFAD, NGO or other partner.

Timeframe: Within 24 month of signing the ACP

Signed by:

Mr Vincent Rubarema
Permanent Secretary
Ministry of Agriculture, Animal Industries and Fisheries
Government of Uganda


Date 02/02/11

Mr Ides de Willebois
Director
Eastern and Southern Africa Division
IFAD


Date 7/12/10

Republic of Uganda
Vegetable Oil Development Project
Interim Evaluation

Main Report

1. The Vegetable Oil Development Project (VODP), was approved by the Executive Board in April 1997, has had a number of extensions and is now due to complete on 31 December 2011 and close on 30 June 2012. The interim evaluation was undertaken by the IFAD Office of Evaluation (IOE) as standard procedure in preparation for a possible follow-up phase of the project.

2. The overall objective of the project is to increase smallholders' household cash income by revitalizing and increasing domestic vegetable oil production in partnership with the private sector.

I. EVALUATION OBJECTIVES, METHODOLOGY AND PROCESSES

3. **Evaluation objectives and process.** The evaluation objectives were to: (i) assess the performance and impact of the project; and (ii) generate a series of findings and recommendations to guide the Government and IFAD in financing a second phase of the project.

4. A preparatory mission was conducted on 23-30 November 2008, after which an approach paper, evaluation framework (appendix 8) and desk review note were prepared. A core learning partnership (CLP) was established, comprising IFAD and government representatives to maximize learning from the evaluation findings (membership given in appendix 9). The main evaluation mission was conducted from 2 February to 4 March 2009. The team visited the oil palm project area on Bugala Island, Kalangala District, and six districts where traditional vegetable oilseeds and essential oil crops are being grown.¹ During these visits, the mission met with the district agricultural officers (DAOs) and other local government technical staff, political leaders, millers, input dealers and more than 500 farmers, farm workers and fishermen. In Kampala, Entebbe and other locations, the mission visited government departments, research institutes, the private investor and other implementing partners, in addition to holding discussions with the project coordination office (PCO), Vegetable Oil Development Council (VODC) and the Oil Seeds Subsector Platform (OSSUP) (see appendix 10). An aide-mémoire, with preliminary results and issues identified, was presented to project stakeholders at a wrap-up meeting on 4 March 2009. In addition to the main report, an Agreement at Completion Point (ACP) has been prepared to reflect the understanding between IFAD Management and the Government on the evaluation mission's findings and recommendations. Issues to be considered in the ACP were discussed in a final in-country learning workshop in December 2009.

5. **Methodology.** The evaluation follows IOE guidelines for project evaluations, as contained in the Evaluation Manual.² It reports on implementation results, noting any factors affecting these results, and assesses performance on four main evaluation criteria: project performance (including relevance, effectiveness and efficiency); rural poverty impact (five impact domains),³ other performance criteria

¹ The evaluation focused in depth on three districts (Soroti, Lira and Masindi) that represented high, low and average performance and older and more recent implementation. Three other districts were visited more briefly (Mbale, Apac and Tororo).

² *IFAD Evaluation Manual: Methodology and Processes*. Office of Evaluation, April 2009.

³ The rural poverty impact domains are: household income and assets; human and social capital and empowerment; food security and agricultural productivity; natural resources and the environment; and institutions and policies.

(innovation and sustainability); and the performance of implementing partners. Each of these evaluation criteria are rated on a six-point scale.⁴ Ratings apply to the project as a whole.

6. This is a well-documented project, with regular annual reporting, systematic collection of monitoring and evaluation (M&E) data, a mid-term review (MTR), three baseline studies and one impact assessment study (IAS). There were also a number of special studies and reports. The IFAD Country Programme Manager (CPM) assisted in the collection of all project documents and provided summaries of specific issues and reports. In addition, the Government prepared a self-assessment of the project, based largely on the main questions in the evaluation framework. The self-assessment and the complimentary information provided by the CPM were of good quality and included important information, data and analyses that were used in the evaluation process.

7. The evaluation did not assess the project components as described in paragraph 28. The evaluation team found that this original three-component design did not coherently represent the different elements of the project and did not reflect the actual project structure in practice. During implementation, the project has focused on the three sets of crops, each with different objectives, target groups, modes of implementation, geographic areas and supporting institutions. These three sets of crops consist of oil palm from the first component of the original design and the traditional oilseeds (i.e. sunflower) and essential oils (i.e. citronella) from the second component. The third component mostly provides institutional support to organizations that focus on one of the three sets of crops. Therefore, a more coherent structure would have consisted of three different components or subprojects based on the three sets of different crops (oil palm, traditional oilseeds and essential oils). A revised project structure outlining the three subprojects, as agreed at the outset of the evaluation with the Government of Uganda and the East and Southern Africa Division, is presented in appendix I and serves as the basis for this report.⁵

8. For the analysis of impact, particular emphasis was placed on the traditional oilseeds subproject, which has been operational for more than ten years and has involved large numbers of poor farmers. The smallholder element of the oil palm subproject has been operational only for three years and full benefits will not be seen until the first harvesting of the fresh fruit bunches (ffbs) commences in early 2010. Substantial poverty impacts from the essential oils subproject are not expected in this exploratory phase.

9. The scope for a systematic analysis of impact in the traditional oilseeds subproject was limited by problems of comparability between the baseline study and the IAS and the fact that neither covered non-beneficiary farmers. Moreover, owing to a poorly developed project logical framework, there were no targets that could provide the basis for a precise assessment of its effectiveness. Therefore the evaluation interprets the results in relation to the general objectives set out in the appraisal documents.

10. Two extra studies were commissioned in order to supplement gaps in information on social impact: a local participatory rural appraisal (PRA) expert conducted discussions with groups of beneficiary farmers and interviewed a number of well-off, less well-off and poor households in each area visited. For an assessment of goal-level impacts, an analysis of household poverty and vegetable oil consumption in the VODP traditional oilseed districts was commissioned from the Economic Policy Research Centre (EPRC), Makerere University. See appendix 2 for a more detailed description of these data sources. For the oil palm subproject, the evaluation focused on discussions with principal stakeholders with regard to their perception of impacts thus far.

⁴ The rating scale is as follows: 6 (highly satisfactory); 5 (satisfactory); 4 (moderately satisfactory); 3 (moderately unsatisfactory); 2 (unsatisfactory); and 1 (highly unsatisfactory).

⁵ This representation differs from the original project component design (see discussion at paragraphs 29-30).

II. COUNTRY AND SECTOR BACKGROUND⁶

11. **Summary.** The main background factors of relevance to VODP are: agriculture's diversity and changing role in the economy; the existence of a generally favourable policy environment; vulnerability to economic and climatic shocks; and insurgency and insecurity in parts of the project area. Uganda achieved high rates of growth during the 1990s following implementation of the Government's economic recovery programme, macroeconomic stabilization, structural reform and buoyancy in the coffee export market. These rates have been maintained since 2000, with high inflows of direct foreign investment and development assistance. As a result of the country's impressive growth and strong pro-poor policies, poverty declined from 56 per cent in 1992 to 31 per cent in 2005 (see para. 19). However, Uganda is still a very poor country with a low per capita gross domestic product (GDP), a predominantly rural population (where most of the poverty is concentrated), high dependence on development assistance, landlocked position, and vulnerability to events in neighbouring countries.

Box 1. Uganda: Key Socio-economic and Poverty Statistics

Land area: 241,000 km², of which 35% is suitable for agricultural crops
Population: 24.2 million, of which 87% is rural (2002 census).
Annual population growth: 3.2 %. Rural female fertility rate: 7.1 live births (2006)

GDP per capita, market prices: US\$485 (2007)
Average annual GDP growth 2002-07: 8.3%
Average annual GDP per capita growth 2002-07: 4.9%
Average agriculture share of GDP 2002-07: 23.4%
Average annual agriculture growth rate 2002-07: 1%
Exports as % GDP: 12.6%. Agricultural exports as % of total exports: 50% (2007)
Development assistance as % of GDP: 12.6% (2007)
Agriculture's share of government and donor-funded budget allocations: 3.6% (2006/07)

Percentage of rural households in poverty: 34% (2005)
Human Development Index (HDI): 0.581; Rural HDI: 0.549 (2005)
Rural net primary school enrolment ratio: 83.7% (2005/2006)
Rural infant mortality rate: 88 per 1,000 live births (2006)
% of rural population with access to improved water: 64% (2006)
HIV/AIDS prevalence rate: 6.4 (2005)

Note: In May 2008, the Uganda Bureau of Statistics released a new GDP series starting in 2000-2001, with 2002 as the base year. The new data assign larger weight to industry and services, which have had higher growth, and lower weight to agriculture, which had lower growth. As a result, the new GDP growth figures are higher than those conventionally reported and agricultural shares of GDP are lower.

12. **Agriculture.** While agriculture remains a key sector, its share of GDP and growth rates have been declining since 2000. In 2007, agriculture accounted for 50 per cent of exports and over 70 per cent of the labour force, and in many parts of the country it provides the main source of livelihood. Uganda is well endowed for agricultural production, with two rainy seasons per year and relatively fertile soils, but there are important regional variations in these endowments. Agriculture is vulnerable to climatic hazards, particularly drought and floods, which have increased in frequency in recent

⁶ This section has drawn mainly on the following sources: *Moving beyond Recovery: Investment and Behaviour Change for Growth*. World Bank Country Economic Memorandum, Vol II, chapter 2, October 2007; Uganda Human Development Report UNDP 2007; Annual Report 2007/2008, Bank of Uganda 2008; *Uganda: Poverty and Vulnerability Assessment*, World Bank 2006; Demographic and Health Survey 2006. UBOS 2007; *Evaluation of Uganda's Poverty Eradication Action Plan (PEAP)*, Oxford Policy Management, July 2008.

years.⁷ As a result, both agricultural output and prices fluctuate markedly from year to year. Agriculture is also vulnerable to pest and disease, such as coffee wilt, banana wilt and foot-and-mouth disease. Food security remains a concern in drought-prone areas.

13. Agricultural production is highly diversified, with some 17 crops being produced nationally. Of these, food crops predominate (averaging 55 per cent of output by value between 2003 and 2007), with three primary staples (banana/'matoke,' cassava and sweet potato) accounting for about half of this. Industrial crops (coffee, sugar, cocoa, tea, cotton, tobacco) account for only 9 per cent of output, the remainder being forestry (16 per cent), fishing (11 per cent) and livestock (9 per cent). Traditional export crops (coffee, cotton, tea, tobacco) have been affected by crop disease and fluctuating or declining world prices, as a result of which their production had fallen to 30 per cent of exports by 2007. However, non-traditional agricultural exports, particularly fish, maize and cut flowers, have risen to 20 per cent of exports.⁸



Oil palm seedlings on Bugala island

Source: IFAD Evaluation Mission, 2009

14. While Ugandan agriculture is typically portrayed as dominated by small-scale subsistence farming and rangeland herding, there has been increasing commercialization of smallholder production. In 2005, 58 per cent of agricultural output and 46 per cent of food production was marketed, and 77 per cent of farmers were selling part of their produce. Market integration of agricultural foodstuffs has been improving, despite the high transport costs arising from poor rural road infrastructure and high fuel prices. Commercialization of agriculture has been stimulated by urban growth and cross-border trade with Kenya, the Democratic Republic of Congo (DRC) and Sudan, much of which has consisted of food crops. In fact, food crops such as cassava and potatoes provide some of the highest returns per hectare; sugar and cotton provide some of the lowest.

15. Much of the growth in agricultural production, especially during the 1990s, was associated with an expansion in the area under cultivation. However, the scope for further expansion is now limited and population pressure is leading to declining farm sizes. As a result, farmers are intensifying their production through intercropping and reducing land for fallow. Farm mechanization, improved land management practices and input use remain low. Uganda has very low rates of fertilizer use and many farmers lack knowledge of its appropriate use.⁹

⁷ In the north and eastern regions of Uganda, one third of annual weather records between 1946 and 1999 show either drought or floods, i.e. they occurred every three years on average. *First National Communication for Uganda*, United Nations Framework Convention on Climate Change, October 2002.

⁸ Data from Uganda Export Promotion Board.

⁹ Average yields are well below the potential obtained by research stations. In 2006, fertilizer was being used on only 1 per cent of farms surveyed. See also VODP Appraisal Document, Vol. II, working paper 2.

16. Traditionally there was a marked gender division of labour in agriculture, with women providing over 80 per cent of labour on food crop production and yet lacking formal land rights.¹⁰ Men concentrated on cattle, ox-ploughing and marketing of cash crops, while women were responsible for field maintenance, post-harvest handling, small livestock husbandry and food processing. However, this seems to be changing: with the development of new crops and the commercialization of food crops, there is more joint decision-making and sharing of agricultural work. A major problem (a product of HIV/AIDS) is the increasing number of widows and orphans in rural households.

17. **Insurgency and insecurity.** The scope for growth and poverty reduction in the northern region has been much less than in other parts of the country, owing to adverse weather conditions, insurgency and insecurity. Already less well endowed in terms of climate and soils, over the last 20 years or so, the region has been affected by an insurgency led by the Lord's Resistance Army (LRA), which targeted the civilian population and went on a rampage of indiscriminate murder, mutilation, abduction of children and other atrocities. Schools and community buildings, farm dwellings, crops and livestock were destroyed; livelihoods were disrupted; large numbers of families were displaced; and there was a breakdown of law and order. Directly or indirectly, it is estimated that about two-fifths of all districts and one third of the total population were affected. In 2007, there were 2.7 million internally displaced people (IDP) living in camps.¹¹ Since the cessation of hostilities in August 2006, peace has been gradually restored in the area – although the LRA leader's failure to sign the final peace agreement in April 2008 has perpetuated feelings of insecurity in the area.

18. In addition to the insurgency in the north, the *Karamoja* rangelands in the north-east – a dry area mainly occupied by pastoralists – are subject to intermittent banditry and cattle rustling. Moreover, on the north-western border with the DRC there is an influx of refugees fleeing from fighting between the Congolese army and rebel groups.¹²

19. **Poverty.** Household consumption poverty fell spectacularly between 1992 and 2006.¹³ Less than one third of all households in Uganda now live below the poverty line. While poverty levels have fallen in both rural areas and the towns and cities, there are still heavy concentrations in rural areas where it is one and a half times higher than in urban centres (34.2 per cent compared with 13.7 per cent).¹⁴ This affects the national figures since such a high proportion of the total population is rural (87 per cent). Poverty is also more heavily concentrated in the northern and eastern regions, particularly in the north where almost two thirds of the rural population are poor. A World Bank survey of northern districts in 2004 showed an even higher rate of 73 per cent.

20. Human development indicators improved markedly in 1992-2006. The Human Development Index (HDI), which incorporates life expectancy, adult literacy and GDP per capita, rose from 0.272 in 1995 to 0.581 in 2005.¹⁵ Improvements in HDI figures were seen in both rural and urban areas and in all regions, although more so in the central region and less in the north. Major increases in government and donor funding for human development, combined with a reduction in fees for primary education

¹⁰ Land rights are set out in the Uganda Constitution (1995), the Land Act in 1998, and a Land Amendment Act of March 2004. Large parts of the country are under 'customary' tenure, where usufruct rights are passed down through the male line. Only 8 per cent of women have leaseholds and 7 per cent own land.

¹¹ *National Peace, Recovery and Development Plan for Northern Uganda (PRDP)*, March 2007.

¹² Bundibugyo, the proposed second site for palm oil development, was withdrawn from the project because of security problems at the border with DRC.

¹³ The 2002/2003 household survey showed a small increase in poverty, but there are doubts about the reliability of these data because of inconsistency with information on household assets (see *Uganda: Poverty and Vulnerability Assessment*, World Bank, 2006, annex 1).

¹⁴ 'Urban' is defined by administrative status in Uganda, not population size, i.e. gazetted cities, municipalities and town councils as defined in the Local Government Act, 2000.

¹⁵ Uganda Human Development Report. UNDP, 2007, p 46.

and health services, produced a rise in net primary school enrolments, improved access to safe water and reduced infant and maternal mortality.¹⁶

21. Despite these achievements, much remains to be done to reduce rural poverty. According to the 2002 Uganda Participatory Poverty Assessment, rural people still felt that their basic needs were not covered and that their livelihoods were precarious; they were still vulnerable to ill-health and disease and were constrained by low levels of literacy and lack of access to land, productive assets and markets.¹⁷

22. **Policy environment.** Throughout the project period, the policy environment has been focused on growth, poverty reduction and agricultural modernization, with an increased role for the private sector. Since 1998, the PEAP has provided the main framework for government policy. Within that framework, the Plan for the Modernization of Agriculture (PMA) was launched in 2001 and the Development Strategy and Investment Plan in 2003. The vision of the PMA is poverty eradication through a profitable, competitive, sustainable and dynamic agricultural and agro-industrial sector. Decentralization has given greater authority and responsibility for service delivery to district local governments (DLGs). Recent policy initiatives include 'Prosperity for All' (PFA); a new National Development Plan under development will eventually replace the PEAP.

III. PROJECT BACKGROUND

23. **Project context, rationale and objectives.** The VODP was developed over a period of almost eight years before it was eventually approved by IFAD's Executive Board in 1997.¹⁸ It was a product of the Government's strong interest in economic reconstruction after it took office in 1986, and was intended to be fuelled mainly by private sector-led agricultural growth. Of particular interest was the recovery of previously depleted traditional exports and diversification into new export-earning or import-substituting cash crops. The edible oils subsector had declined since the mid-1970s but domestic demand was rising fast as a result of the general growth in consumption. As most of this was being covered by imports, with increasing foreign exchange costs, the subsector was a prime candidate for import substitution efforts.¹⁹ An additional justification for the project was the nutritional benefit of increasing domestic consumption of edible oils, for which Uganda was well below the intake of its neighbouring countries and accounted for only one tenth of the world level.²⁰

24. At the time of project approval, vegetable oil production was mainly a by-product of cotton ginning in the north-east of Uganda²¹ but with the return of private investors to the subsector and the efforts of various donors and NGOs other oilseed crops such as sunflower were being promoted.²² Because of its extraordinarily high oil production per hectare and the large amount of palm oil

¹⁶ Net primary school enrolments (proportion of children aged 6-12 years enrolled) in rural areas increased from 60 per cent in 1992 to 84 per cent in 2005.

¹⁷ *Deepening the Understanding of Poverty, Second Participatory Assessment Report*. Ministry of Finance, Planning and Economic Development, 2002.

¹⁸ An international oil palm specialist visited Uganda in 1989 under a technical cooperation agreement between the Food and Agriculture Organization of the United (FAO) and the Government. This was followed by an FAO/IFAD identification mission (1991), an IFAD specific identification mission (1993), an FAO/Investment Centre formulation mission (1994-5), an IFAD pre-appraisal mission (1995), and an IFAD/World Bank/Government appraisal mission (1996).

¹⁹ VODP Appraisal Report 1997, Vol. I, pp 4-5.

²⁰ Per capita daily consumption of vegetable oils in 1997 was estimated at 2.74g compared with 10.96g in the United Republic of Tanzania and 19.18 in Kenya (FAO consumption statistics).

²¹ Other crops such as groundnut, sesame and soybean were worth more whole than if processed as oil.

²² A National Sunflower Programme was launched in 1988 with support from the United States Agency for International Development (USAID). Other donors were African Development Bank (AfDB), World Bank, European Union (EU), the German Agency for Technical Cooperation (GTZ) and the Dutch NGO, Netherlands Development Organisation (SNV). Other NGOs such as the Appropriate Technology Uganda Limited (AT-U) and Uganda Oil Seeds Producers and Processors Association (UOSPA) were supported by USAID.

imports, initiatives were under way to develop oil palm, which was not being grown or processed commercially at the time.²³ Finally, the potential for development of essential oil crops as a high-value alternative on poor soils was also being explored.²⁴

25. While the Government's primary interest in developing the subsector – especially palm oil – was as a means of promoting import substitution and export diversification, IFAD's focus was more on the opportunity to increase smallholder incomes in innovative ways. The vegetable oil subsector was relatively neglected at the time. Oil palm promised high economic returns because of the 10-15 per cent increase in price owing to the cost of transportation for imports, but would require partnership with a private investor. In this context, IFAD could bring a pro-poor focus by financing the participation of small farmers. Sunflower had yet to demonstrate its potential as a staple cash crop in the poor, war-ravaged regions of Uganda, and little-known essential oils offered the possibility of a lucrative niche market for poor farmers.

26. The goal of the project was 'to increase household cash income among smallholders by revitalizing and increasing domestic vegetable oil production'. The objectives were 'to (i) develop a palm oil industry, which is well-integrated into the subsector, to the benefit of smallholder growers and private sector processors, and (ii) optimise yields and oil extraction technology for sunflower and other arable oil crops'.²⁵

27. **Key design features.** The project adopted a broad approach for the vegetable oil subsector that meant working with a variety of vegetable oil crops, stakeholders, institutional levels, and geographical areas, and necessitated coordination among many public and private institutions at the national, district and local levels. In particular, a number of links in the traditional oilseeds value chain were supported, including adaptive agricultural research, seed breeding, multiplication and distribution, cottage processing and the development of food quality standards. This was an implicit value-chain approach in support of the subsector, although the term was not used in the appraisal documents.

28. The original design of VODP was structured around three components:

- (a) **Oil palm development.** A nucleus estate of 1,000 ha was initially planned on Bugala Island, Kalangala District, together with 3,500 ha of smallholder development, for a total planted area of 4,500 ha. After the failure of negotiations with the original private-sector investor, the subproject was redesigned in 2000-2003. As a result of the new negotiations with BIDCO Oil Refineries Ltd. (Kenya) (hereafter BIDCO),²⁶ the nucleus estate was increased to 6,500 ha and the 3,500 ha for smallholder development maintained, thereby bringing the total area planted to 10,000 ha. It was also to have included development in another location (Bundibugyo)²⁷ (80 per cent of base costs).
- (b) **Subsector development.** The Vegetable Oil Development Fund (VODF) was to have supported traditional vegetable oilseed production and processing by farmer groups in the north, north-east and mid-west of Uganda; main crops were sunflower, soybean, groundnut and sesame. A second element was to promote R&D of essential oil crops (15 per cent of base costs).

²³ Various trials had been developed in previous years (in the 1960s, 1972-1973 and 1993-1994), and any processing by smallholders was done by crude manual methods.

²⁴ In 1996, the Government commissioned a study that was financed by EU.

²⁵ President's Report 1997, appendix III, logical framework.

²⁶ BIDCO is the main private-sector partner; its executing agency for plantation development is Oil Palm Uganda Ltd. (OPUL).

²⁷ The Government-BIDCO agreement (2003) also foresees the development of an additional 30,000 ha of oil palm in other areas, with 20,000 ha and 10,000 ha, respectively, developed by BIDCO Oil Refineries Ltd. and the Government. But these areas are not part of the VODP project.

- (c) **Institutional support.** This included the PCO; a newly-established VODC to steer the PCO and promote the subsector; various institutes of the National Agriculture Research Organization (NARO)²⁸ to enhance adaptive research into various vegetable oil crops; the National Environmental Management Authority (NEMA) for environmental management of oil palm production and processing; establishment of the Kalangala Oil Palm Growers Trust (KOPGT); and the Uganda National Bureau of Standards (UNBS) to develop quality standards for vegetable oils (5 per cent of base costs).

29. This three-component design did not coherently represent the different elements of the project and created problems for reporting and financial accounting (see para. 115). Nether did it reflect the actual project structure, which consists of three different subprojects. There was some overlapping of functions between the three components, while the merging of the essential oils with traditional oilseeds in the second component obscured important differences between them. Most of the organizations in the third ‘institutional support’ component focused on one particular crop and should have been integrated with that subproject. A more coherent structure, which differentiates more clearly between the three subprojects, is presented in appendix 1 and is used throughout this report.

30. The three subprojects have different subobjectives, modes of implementation, geographic areas and supporting institutions. The oil palm subproject aims to establish a new industry from scratch with heavy dependence on a single private-sector partner. It operates in a small geographic area, with new forms of land use and a plantation/smallholder mode of production. The traditional oilseeds subproject aims to expand the production and processing of existing oilseed crops. It works in an extensive, agroecologically diverse region, with a variety of implementing partners, using traditional research/extension methods, and has more tenuous links to the private sector. The essential oils subproject aims to explore the potential for production of little-known essential oils. It is a small-scale, experimental and research-oriented initiative, and is piloted in a variety of geographic areas.

31. **Project area and target groups.** The oil palm subproject has always focused on Bugala Island in Lake Victoria, the largest of the 84 islands that make up Kalangala District and site of the district capital, Kalangala. It is 68 km long and 10 km wide at its widest point; it has a total land area of 29,650 ha and a population of 17,355 distributed throughout 5,650 households (2002 census).²⁹ The predominant economic activity is fishing, but there are an estimated 1,300 smallholder farms scattered across the island, growing cassava, bananas, sweet potatoes, maize, vegetables and coffee. At appraisal, the target group consisted of subsistence and landless farm families on the island.³⁰

32. The traditional oilseeds subproject started in six pilot districts in the north and north-east and extended to eight neighbouring districts in 2002. In that year, these 14 districts had a rural population of 5.4 million (approximately 835,000 households).³¹ In 2000 and 2005/2006 some of these districts were subdivided, so the project is now operating in 23 districts in the same area. The original target group consisted of poor smallholder farmers, particularly women, growing sunflower for direct sale to millers or for crushing with the Ram press. An estimated 60,000 households were expected to benefit from the project.

²⁸ NARO is a semi-autonomous organization responsible for agricultural research carried out at a number of specialized research stations and institutes in different parts of the country.

²⁹ This is about 50 per cent of the total population of Kalangala District (at 34,716).

³⁰ The appraisal mentions a target of 3,000 farmers, including relocated landless farmers from the mainland and spontaneous farmers growing oil palm with their own resources. At present there are no farmers in either of these two categories. The 3,000 figure was clearly an overestimate, given available data on the total population. VODP Appraisal Report 1997, Vol. I, p. 17.

³¹ The district rural population in 2002 was as follows: Pilot districts: Apac: 673,733; Lira: 660,445; Pallisa: 486,740; Soroti: 359,805; Kumi: 351,088; Katakwi: 292,074. Expansion districts: Mbale: 637,079; Masindi: 459,490; Gulu: 355,970; Pader: 317,527; Sironko: 277,996; Kitgum: 240,584; Kapchorwa: 186,583; Kaberamaido: 129,544. In the baseline study (1999), the average household size was 6.5 persons.

33. The essential oils subproject was trialed in a variety of districts: citronella and lemongrass in three districts in the north-east; geranium and *Prunus Africana* in Mukono District; and shea nut in Katakwi and Lira Districts. No target group or geographical area was specified for the essential oils subproject.

34. **Time frame.** The VODP was approved by the Executive Board in April 1997 and the loan became partially effective in July 1998. Activities in the traditional oilseeds and essential oils subprojects got under way quickly, but implementation of the oil palm subproject began only in July 2003 owing to delays in securing the private-sector partner.³² There were further delays in acquiring land for the nucleus estate, in attracting smallholders and outgrowers to the project, and in establishing KOPGT. Planting on smallholder farms began only in 2006 and the harvesting of ffbs was expected to commence in early 2010. Originally planned as an eight-year project, VODP has been extended from its original completion date of December 2005 to December 2011, by which time the project will have been operational for more than 13 years.



Evaluation mission members meeting with oil palm farmers

Source: IFAD Evaluation Mission, 2009

35. **Project costs.** Total project costs were originally estimated at US\$60 million, consisting of an IFAD loan of US\$20 million, US\$33.1 million in cofinancing from a private-sector partner, and contributions of US\$3.8 million and US\$3.1 million, respectively from the Government and the beneficiaries. However, the scale of the oil palm subproject was later increased to ensure its financial and economic viability. The private investor and the Government increased their contributions to US\$120 million and US\$12 million, respectively, thereby bringing the total project costs to around US\$156 million.

36. **Implementation modalities.** The executing agency is the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), with the PCO responsible for overall management and coordination of project activities. Implementation of the oil palm subproject is the responsibility of the Oil Palm Uganda Limited (OPUL), KOPGT and Kalangala District Local Government (KDLG). The NARO Coffee Research Centre (COREC) provides adaptive research into oil palm. The traditional oilseeds subproject is implemented primarily through the DAOs and through UOSPA, AT-U, UNBS and two NARO research institutes, the National Semi-Arid Resources Research Institute (NaSARRI) and the

³² The Government-BIDCO agreement was signed in April 2003 and disbursement effectiveness for this subproject was declared in July 2003.

National Crop Resources Institute (NaCRRI).³³ The essential oils subproject was originally implemented by the Kawanda Agricultural Research Institute (KARI), but this function has now been transferred to NaCRRI.

37. The PCO handles the day-to-day coordination of project activities from its office in Kampala. It does not implement project activities directly; its role is more one of coordination, promotion, facilitation and supervision. The PCO also acts as secretariat to the VODC, the Impact Monitoring System (IMS) and the Land Acquisition Task Force (see para. 47) and is the government focal point for the vegetable oil subsector as a whole. The PCO has a total of 15 staff:³⁴ six of the technical staff are seconded from MAAIF, the others are contracted.

38. The VODC acts as the steering committee for the project, providing overall direction of project activities, policy and technical guidance, and acting as a clearing house for VODP-funded activities. It approves the annual workplans and budgets (AWP/Bs) and provides a forum for discussion on project implementation and for the development of the vegetable oil subsector as a whole. The VODC has seven members representing the Government and the main implementing partners³⁵ and it meets at least three times per year. The PCO acts as secretariat to the VODC.

39. **Monitoring and evaluation (M&E) system.** VODP employs a full-time M&E officer, seconded from MAAIF.³⁶ M&E data for traditional oilseeds are collected at the district level from a designated focal point in the DAOs. They, in turn, collect information from field officers at the subcounty level. This information is reported on a quarterly basis, as part of the DAOs' regular monitoring against targets set out in their AWP/Bs. All extension activity data are disaggregated by gender. On-the-spot field checks are regularly carried out by the VODP M&E officer in order to validate reported progress. For the oil palm subproject, M&E data are collected by KOPGT on a quarterly basis. M&E data are reported to the Government and IFAD in VODP's annual reports, which have been submitted every year. However, because of poorly specified indicators in the logframe, not all relevant activities have been monitored (see Appendices 2 and 3 for further details).

40. Since 2005, MAAIF has been rolling out a participatory planning, monitoring and evaluation (PPM&E) system. A capacity-building programme included training in June/July 2005 for all IFAD project M&E staff in East and Southern Africa, and subsequent training of three trainers from all VODP districts. These trainers have cascaded PPM&E to field officers in the subcounties and thence to farmer groups. About 200 farmer groups are now implementing their action plans.

41. **Supervision and implementation support.** The project was supervised by the World Bank between 1998 and 2004 and by the United Nations Office for Project Services (UNOPS) between 2004 and 2008. Since 1 January 2009, it has been directly supervised by IFAD. An MTR was carried out by the World Bank in September 2003 (the report was issued in October 2004).

IV. IMPLEMENTATION RESULTS

42. The pace of project implementation has been uneven, most obviously because of delays in the start-up of the oil palm subproject. Implementation of the traditional oilseeds subproject was faster because the required structures were already in place, although it was affected by insurgency, adverse weather and later by changes in local government and the agricultural extension system. However, the PCO has demonstrated strong commitment and energy in driving the project forward.

³³ NaSARRI covered sunflower, groundnut and sesame and NaCRRI soybean and essential oils.

³⁴ The project coordinator, an M&E officer, two technical officers, four accountancy and procurement staff, three administration and support staff, and four drivers.

³⁵ MAAIF, Ministry of Finance, Planning and Economic Development (MFPED), Ministry of Tourism, Trade and Industry (MTTI), NARO, OPUL, UOSPA and the Uganda National Farmers' Federation (UNFFE).

³⁶ The M&E officer also monitors other projects within the ministry's overall M&E framework.

A. Oil Palm Subproject

Factors Affecting Implementation Results

43. **Delayed selection of the private-sector partner.** A bidding process for selection of the private investor in the oil palm subproject was initiated in April 1997. Over the next two years, the Government's negotiations with the top ranked bidder, Kakira Sugar Works (1985) Ltd., were desultory and eventually cancelled. In February 2000, a Memorandum of Understanding (MOU) was signed with the second bidder, BIDCO, outlining broad areas of agreement, including important changes in project design. However, a further three years elapsed before negotiations were concluded in April 2003. This delay was occasioned by a number of factors, including discussions over the pioneer tax concessions requested by BIDCO, land purchases for the subproject and a reassessment of feasibility and impact arising from its expanded scale.

44. The five-year delay in selecting a private-sector partner had serious practical and financial implications for the subproject. The setting up of KOPGT, establishment of the nucleus estate and smallholder/outgrower oil palm plantings, and the harvesting of ffbs were all delayed. The oil mill currently being constructed will start with a lower capacity than that initially anticipated because of the smaller than expected ffb harvests. The delays incurred substantially increased costs for both the Government and the private investor (see paras. 152-153).

45. **Negative publicity.** In the early years, there was much public opposition to the project from some NGOs, donors, opposition politicians, civil servants and subsector competitors. Some of the concerns related to the proposed tax concessions³⁷ and the perception of 'land giveaways' to private investors; other concerns were environmental, relating to the possible degazetting of public forests, displacement of squatters, lowered biodiversity and the undermining of government forestry and environmental authorities. Many of these criticisms were founded on misconceptions or were politically motivated. The Government had already invested time and resources in addressing the main issues: a new environmental impact assessment (EIA) was undertaken in 2003 and approved by NEMA conditional upon certain risk-mitigation conditions being observed. The policy of degazetting public forests was abandoned and a thorough impact management system was set up. An independent study of the tax concessions undertaken in 2002 considered that they were justifiable.³⁸

46. Nevertheless, the World Bank was concerned about compliance with its internal environmental safeguards policies and felt unable to continue as cooperating institution. The VODC, PCO, district leadership and the IFAD country team invested commendable efforts and resources to clarify the situation, counteract misunderstandings and arrange site visits for all relevant parties to obtain first-hand information on the situation. However, a number of misconceptions remained and can still be met today. Apart from the effect on the morale of the implementing partners and the extra costs of countering the criticisms, this external negativity held back farmers from joining the smallholder scheme and from providing land for outgrower fields.

47. **The land problem.** Under its agreement with BIDCO, the Government committed itself to handing over 6,500 ha of plantable land, free of encumbrance and suitable for agricultural use, for the nucleus estate under a 99-year lease. This was an additional 5,500 ha over the originally planned 1,000 ha. Some 3,000 ha were formerly public land and the additional 3,500 ha were expected to be acquired through private land purchases and the degazetting of public secondary forests. To address this, the Government set up an interministerial Land Acquisition Task Force representing all relevant

³⁷ Tax concessions were granted to BIDCO on grounds of the pioneering nature of the investment, high level of investment, long payback period, remote location and the general riskiness of investment in agriculture (2005 Technical Review Report, pp. 43-45). The concessions do not apply to the operations of the refinery at Jinja, which have already made substantial contributions to government tax revenues.

³⁸ The benefits of the investment in terms of foreign exchange savings, employment, and poverty reduction were considered to outweigh the cost to government foregone tax revenues.

stakeholders (2001).³⁹ However, the degazetting of public forests was discarded in 2001; the NEMA conditions proscribed the inclusion of a 200-metre strip of protected shoreline; and other parts could not be planted for cultural or agroecological reasons.⁴⁰ Therefore, a balance of 1,400 ha had to be purchased over and above the 6,519 ha that was handed over on signature. This was a slow process because of the complexity of land tenure arrangements on the island,⁴¹ the high proportion of absentee owners and the Government's commitment to purchasing the land on a willing-buyer/willing-seller basis.⁴² Some landowners were reluctant to sell because of negative publicity about the project, and the process was also slowed down by government land purchase procedures, including land surveys and price authorization by the Government Valuer (land prices soared during this period).⁴³ The Government hired lawyers and surveyors to speed up the acquisition process and engaged in a variety of public relations activities. However, the delay in land acquisition significantly increased financial costs to both the Government and the investor and consumed scarce human resources in the PCO.

48. The problems over land affected the speed of registration by smallholders and outgrowers. Both groups needed evidence of a right of tenure as a condition of participation (land title or letters from local chiefs assuring that they had lived on the land for more than 12 years), but there were similar problems of ambiguous ownership and tenancy rights, lack of consent by landowners, and disputes over rights and boundaries. Time was needed for their land to be surveyed, landlord permissions to be obtained, conflicts to be resolved and legal processes completed. The project provided the district land committees with extra resources, but these were still insufficient for the heavy caseload. In addition, the proposed grants of land to returning islanders from the mainland, which would have been a major incentive for smallholder participation, could not proceed because of the lack of public land. These problems resulted in a highly fragmented pattern of land utilization, which has lowered efficiencies for the investor because of the higher costs of transport and mobilization of labour.

Subproject Activities and Outputs

49. The 2005 revised output indicators and targets for this subproject included: the establishment of 6,500 ha of oil palm on the nucleus estate, 3,500 ha of outgrower/smallholder plantations, and an oil processing mill; setting up of KOPGT; provision of social/public infrastructure, oil-palm related employment opportunities, technical training in oil palm; and enhanced local government service provision capacity.⁴⁴ In addition, environmental management and monitoring were to be undertaken as well as adaptive research on oil palm (originally part of the institutional support component).

50. **Establishment of the nucleus estate.** Once the Government-BIDCO agreement was signed, the investor moved rapidly towards implementation. OPUL was immediately set up to implement the plantation in association with Wilmar Plantation Services.⁴⁵ The nucleus estate and the refinery at Jinja

³⁹ The work of the Land Acquisition Task Force was to identify land for purchase, ensure there were no 'encumbrances' or environmental sensitivity, inspect and value it, recommend for purchase, negotiate with the landowners, facilitate agreement signing and ensure that the land was protected from future encroachment. It comprised the Ministry of Lands, Ministry of Justice, MAAIF, MFPED, NEMA, the Uganda Investment Authority and KDLG.

⁴⁰ Cultural issues included burial grounds and cultural stones. Some of the land was too rocky or sandy for oil palm planting.

⁴¹ Much of it was '*mailo*' land, which is inherited by non-resident owners without formal land titles and occupied by *Kibanja* tenants whose usufruct rights are recognized under the 1998 Land Act. Some landowners could not be located or were deceased, did not know where their land was, or had lost their titles. In other cases there were family wrangles over ownership, once it was realised there was a market.

⁴² Under the 1995 Uganda Constitution, land cannot be compulsorily acquired except for reasons of security or public health grounds.

⁴³ Land prices rose from UGX 150,000 in 2002 to UGX 800,000 in 2008.

⁴⁴ Second logframe at reappraisal. technical review report 2005 (appendix 3).

⁴⁵ Wilmar Plantation Services is a branch of Wilmar International Ltd, a palm oil trading company based in Singapore. Its operations are located in more than 20 countries across four continents, with a primary focus on Indonesia, Malaysia, the People's Republic of China, India and Europe.

were largely established within the first two years. OPUL recruited the necessary labour force for the nucleus estate and outgrower fields (currently 1,469 workers), constructed plantation roads (300 km so far) and established field headquarters, a workshop and workers' quarters and amenities.

51. At the time of the mission, 7,700 ha had been made available to OPUL, of which 6,000 ha was plantable land and 5,624 ha had been planted already. The PCO considered that the outstanding 500 ha would be delivered by the end of 2009. The oil extraction mill was under construction and was expected to be operational by September 2009.

52. OPUL conducted a one-month residential training course on oil palm for KOPGT. The company has also supplied the necessary inputs to KOPGT when required, together with technical backstopping on an ongoing basis. One exception was the delayed delivery of seedlings arising from uncertainty about land availability.

53. **Establishment of KOPGT.** KOPGT was incorporated in June 2005 and started operating one year later; a tripartite agreement covering its relations with OPUL and the Government was signed in August 2006. KOPGT is a trust, representing the interests of farmers, national and local government, local NGOs and VODP. The objectives of the trust are to defend, promote and represent the interests of oil palm farmer beneficiaries and to perform a brokering role between farmers, the Government and OPUL, including the provision of loans for oil palm establishment. Major mechanisms for representing the interests of its beneficiaries are a 10 per cent shareholding in OPUL, participation in a multistakeholder ffb pricing committee and membership of a services cost panel.⁴⁶ KOPGT performs a wider role than that envisaged at appraisal: it undertakes farmer registration and organization of farmer groups, coordinates land survey work with KDLG, administers loans, coordinates the provision of services and inputs to farmers by OPUL, and engages in general public relations for the project. The KOPGT secretariat has a staff of 18, including eight field officers, and operates temporarily from a small office in Kalangala.⁴⁷

54. KOPGT has done a good job of mobilizing and organizing farmers through their unit and block committees. In March 2009, with IFAD funds, the Government purchased a 10 per cent shareholding in OPUL on behalf of KOPGT.⁴⁸ When the first harvest started in October 2009, KOPGT was expected to participate in the pricing committee that would determine the details of applying the price formula (see para. 67). There is now a need to ensure that KOPGT has the capacity to play its expected representational role on these two mechanisms, which have been put in place to ensure that farmer views are heard and taken into account. Given the diverse membership of the Trust and heavy government representation, farmers have considered that they need their own tertiary-level organization to promote their interests. The formation of the Kalangala Oil Palm Growers Association (KOPGA) will facilitate more specific discussions of farmers' problems than is possible at the trustees' meetings, and provide a key communication link between KOPGT and the farmers.

55. The extension service provided to smallholder oil palm growers through the unit and block committees is mainly from KOPGT and very little from the DAO and its staff. It appears that NAADS is unlikely to cover oil palm as one of its enterprises, and in any case it does not have the required expertise to do so. The KOPGT extension staff are capable of advising on establishment (planting, lining) and maintenance (weeding and establishment of cover crops) but are still expected to attend training in harvesting practices. Their knowledge is very basic and will need to be developed further, especially in areas such as fertilizer use, harvesting techniques and record-keeping. There will be a continued need for extension advice from KOPGT and technical backstopping by OPUL (albeit on a

⁴⁶ The price for the ffbs is based on an agreed formula set out in the Government-BIDCO agreement; the pricing committee will monitor compliance with this formula. The services cost panel, comprising the KOPGT manager and credit officer, two trustees and two block representatives, agrees the price of inputs provided to smallholders, and, through OPUL, to outgrowers. This structure is smaller than originally envisaged to enable speedier decision-making.

⁴⁷ A new building has been under construction for several years.

⁴⁸ Valued at US\$600,000 plus the land for the nucleus estate.

reducing scale), though in ever more specialized matters as the capacity of field extension staff develops. Farmers both like and appreciate the KOPGT extension system, saying they would like to have a similar system in relation to other crops and enterprises.

56. The 'Oil Palm Growers' Scheme' was devised in 2005 by an IFAD/Government-supported consultancy to address the need for short-term financing to cover OPUL's provision of inputs and services to smallholders during the initial stages of plantation establishment.⁴⁹ Modelled on other outgrower financing schemes in Uganda in sugarcane and tea, it provides an 'advance' to farmers in cash or kind, which is to be later recovered through harvest payment deductions by KOPGT. The Scheme includes cash loans for labour (land clearing and preparation, planting, maintenance and harvesting) and in-kind items such as seedlings, fertilizer and seeds for cover crops. The loans, together with a 10 per cent annual service charge, will be recovered through deductions by KOPGT from the payment for ffb harvests.⁵⁰

57. While the Scheme was originally to have been administered by a commercial bank, this was not considered necessary because of the minimum risk of default and the temporary nature of the arrangement. There is only one service provider (OPUL), who is also the only purchaser of the ffb; the loans are vetted by the unit loan committees and co-guaranteed by five participating farmers; they are monitored by KOPGT through its involvement in extension and its links to the farmer organizations; land tenure rights and oil palm are pledged as collateral. A key feature of the Scheme is the services cost panel, which determines the prices charged for the OPUL-supplied inputs and services covered by the loans. There will be no need for a special financing vehicle once the target of 3,500 ha has been established and KOPGT will not be providing any other financial services.⁵¹ The loans are processed through the local Stanbic Bank, which plans to extend other types of financial services to the farmers once the ffb payments start flowing. At the time of the mission, the loan portfolio stood at around US\$1.5 million and was growing. The average loan size is US\$1,800 per ha of oil palm.

58. Although KOPGT's role as a financial intermediary was underestimated at project appraisal, it has proved crucial for the development of the smallholder plantings. The approach of building up the capacity of smallholder farmers through extension services and working with their local unit committees to vet and monitor the loans is working extremely well. It has ensured transparency, helped to build confidence and provided broad coverage of the target beneficiaries. The smallholder farmers have developed an enormous attachment to KOPGT, a relationship that is often very difficult to forge between farmers and banks. The administration of the loans could be further improved with better record-keeping by farmers and a more efficient mechanism for the transfer of funds to the local Stanbic branch and onwards to farmers. However, the effectiveness of the current financing scheme will only be seen once loan repayments are made when ffb harvesting commences. At that point, much will depend on farmers' confidence in the ffb collection, pricing and payment systems.

⁴⁹ C. Reiner: *Financing and Institutional Arrangements for Small-scale Oil Palm Grower Support*. IFAD-Government of Uganda consultancy report, May 2005. The report provides detailed guidelines for administration of the scheme.

⁵⁰ The loan repayment period is estimated at eight years, which compares favourably with similar projects in West Africa, where it is 14 years. Supervision report, June 2008, Oil Palm Technical report.

⁵¹ The project has encouraged farmers to participate in other local savings and credit cooperatives (SACCOs) run by the Kalangala Department of Finance Administration (DFA).



Single palm tree on Bugala island

Source: IFAD Evaluation Mission, 2009

59. Overall, KOPGT is performing well, especially considering that it was established from scratch with no experience of oil palm growing. However, its operational effectiveness is somewhat hampered by the cramped office facilities.⁵² KOPGT has developed good relations with OPUL, the KDLG and the farmers. It has adapted well to changing circumstances and developed a pragmatic problem-solving approach well suited to the environment within which it works.

60. **Establishment of smallholder and outgrower plots.** Although the project talks of ‘smallholders’ in a general sense, meaning small farmers, the oil palm subproject distinguishes between (i) ‘outgrowers’, who have an MOU with KOPGT under which they pledge their land for 25 years and receive a full range of establishment and management services from OPUL for the first three years; and (ii) ‘smallholders,’ who grow and manage oil palm on their own land, supported by inputs and other services provided by OPUL and financed by the loans administered by KOPGT, and who will market their ffbs to OPUL at a price agreed by the ffb pricing committee. For operational efficiency, the outgrower plots are consolidated into an agreed minimum block size,⁵³ whereas the smallholder plots are small, scattered and often at a distance from the nucleus estate. It was originally intended that 1,250 ha would be in outgrower plots and 2,250 ha with smallholders, making 3,500 ha in total.

61. Progress in establishing the smallholder and outgrower oil palm plantings has been slow. At the time of the mission, a total of 2,294 ha had been registered and surveyed (66 per cent of the target) but only 1,151 ha had been planted because of ongoing land clearance operations and shortages of seedlings. The uptake has been much slower among outgrowers than smallholders. Table 1 below shows that only 33 per cent of the target outgrower land has been registered and only 18 per cent planted, compared with figures of 84 per cent and 41 per cent, respectively, for smallholder land. In all, there were 651 beneficiaries, of whom 72 were outgrowers (73 per cent male) and 579 smallholders (69 per cent male).⁵⁴ The average size of oil palm registered per beneficiary was 3.5 ha, which would give a total of 1,000 beneficiaries once the 3,500 ha target was achieved.

⁵² This constraint was recognized and a new building for KOPGT was planned. However, the KOPGT building has been delayed for two years and is still not complete – an issue repeatedly raised by the supervision missions.

⁵³ Originally to be blocks of 250 ha but now some are only 50 ha because of the scarcity of outgrowers.

⁵⁴ It is not clear how this translates into the total of households/population benefiting from the project, as some husbands and wives are both beneficiaries.

Table 1. Smallholder and Outgrower Registration and Planting, January 2009

	Smallholders	% Target	Outgrowers	% Target	Total	% Target
Total land registered and surveyed (ha)	1,887	84	407	33	2,294	66
Land planted (ha)	930	41	220	18	1,150	33
Target (ha)	2,250	100	1,250	100	3,500	100
Total beneficiaries	579		72		651	
Men	396		53		449	
Women	183		19		202	

Source: Project M&E data

62. There appear to be various reasons for the slow uptake by outgrowers and smallholders: small farm size,⁵⁵ the long gestation period required for oil palm (four years), concerns about the level of investment required, distrust of OPUL, and landowners discouraging the planting of tree crops by tenants.⁵⁶ In the case of outgrowers, a problem has been the small and scattered nature of farmers' land, which is below the minimum block size and too far from the nucleus estate. Other concerns have been the long-term nature of the commitment, fears that they might not get the land back from OPUL and lack of access to cash through the KOPGT loans.

63. Outgrowers' land is cleared, planted and managed by OPUL in consolidated blocks. However, owing to labour shortages, there have been some delays in the maintenance of the outgrowers' plots, which is a concern to the owners. The mission was shown some outgrower plots that appeared to have no cover crops and insufficient fertilizer. OPUL recognizes that it needs to maintain the outgrower areas to the same standard as the nucleus estate, and agreed to look into and correct this situation; it has also assured the outgrowers that they will receive payment for the ffbs at the yield level of the nucleus estate. Therefore they will not be penalized for any shortcomings on their own plots relative to the nucleus estate.

64. Although the OPUL services benefit many outgrowers, especially those who are old, infirm or away from the island, there are indications that some outgrowers are not comfortable with their lack of involvement in managing the plots. Some complained that they are not informed about what has happened on their land and could no longer identify their own boundaries because the fields had been consolidated into larger blocks. An incentive for the smallholders, which the outgrowers do not have, is that by using their own family labour they are earning cash income. OPUL and KOPGT have agreed to explore ways of increasing the involvement of the outgrowers in their plots. This will also ensure that the transition is not too abrupt when the land is returned to them for oil palm management after three years. There are indications that some potential outgrowers prefer to register as smallholders. This preference may need to be encouraged if the target of 3,500 ha is to be reached.

65. The smallholders visited seem to tend their oil palm plots with enthusiasm and care, although there was some disquiet about the untimely delivery of the seedlings, such that cleared land could not be planted. The use of fertilizer is new to the smallholders, and has been part of the training given to farmers by KOPGT field staff. However, there are indications that farmers are not yet familiar with this practice and that the KOPGT field staff also need more training on this subject.

⁵⁵ Mission interviews with non-oil palm growers indicated that families with extremely small acreages needed to concentrate on food crops. In the baseline survey, 78 per cent of rural households had less than 3 acres (pp. 102-103).

⁵⁶ Reported by various supervision reports.

66. The first harvest of ffbs of oil palm was envisaged for early 2010. The knowledge and skills required to ensure the best quality of ffbs delivered to the mill is still to be disseminated from OPUL to KOPGT, its field extension staff and onwards to the farmers. Plans for logistics (ffb collection centres and field access roads/tracks) were only just being discussed at the time of the mission. Delayed construction of farm-field access roads was causing concern among farmers. Effective execution of the harvesting process will be a critical test for KOPGT, KDLG and OPUL; its success would likely attract increasing numbers of smallholders and outgrowers, whereas a failure would do the reverse.

67. The price of ffbs is determined by the pricing formula contained in the agreement between the Government and BIDCO. The pricing formula starts with the world price in Malaysia, then adds on the cost of ocean transport to Mombasa and rail transport to Jinja (about 10-15 per cent of the initial price), a factor reflecting the oil content of the ffbs and a factor for the industry constant. Thus, the price paid to farmers will fluctuate with the world price while they are also receiving the 10-15 per cent premium for transport to Uganda. The payments to farmers are expected to be equivalent to about 85 per cent of the world price, compared with an industry norm of about 70 per cent.⁵⁷

68. **Environmental management.** Three EIAs were undertaken, possible negative impacts identified and appropriate measures put in place. An environmental management plan was developed and is being implemented. In approving the 2003 environmental impact statement, based on the third EIA, NEMA formulated 24 risk-mitigation conditions to be fulfilled and OPUL seems to be doing its utmost to meet the requirements.⁵⁸ Environmental monitoring is taking place through the relevant government ministries and agencies and the high-level IMS. In addition, there are regular meetings between OPUL, KOPGT and the KDLG. The district environment officer and district health inspector make periodic inspections of the project area. OPUL has carried out two environmental self-compliance audits. Working together, these mechanisms are so far ensuring a high degree of compliance with NEMA conditions.

69. The IMS was set up in 2006 and is operating effectively.⁵⁹ Its mandate is to monitor compliance of oil palm development in line with NEMA conditions, investigate any unanticipated concerns or negative impacts, and deal with other enquiries, concerns or criticisms that might arise. It meets thrice yearly and receives reports from KOPGT, KDLG and the PCO; periodically, it visits the island to check progress. The IMS is rather unique and, from the mission meetings with a variety of stakeholders, the impression gained is that oil palm development is under constant surveillance and that IMS not only monitors compliance with the set conditions but is also pro-active when minor signs of undesirable effects are observed. The situation when the oil mill comes into operation cannot be foreseen but judging from the good functioning of the monitoring system so far, it would be surprising if the conditions set were not adhered to.

70. **Oil palm research.** Uganda has suffered from a general lack of knowledge about oil palm, and any that did exist was confined to the research institute. The role of COREC was to enhance the research base for oil palm development activities, identify other areas/locations of the country with oil palm potential, and raise the profile of oil palm research within NARO.

71. The oil palm research tasks listed in the NARO MOU were mostly covered, except for the environmental impact of drainage and other cultivation practices. Seedlings are being raised at an oil palm nursery established at Kizuza. Four trial sites planted in 1972 were assessed, of which three were abandoned and one is being used by a farmer for small-scale palm oil production. On-station trials planted in 1997 were revived in 2002, but the small scale of the design did not yield clear results. The on-farm trials planted in 2001-2002 have provided useful results but were later hampered by lack of

⁵⁷ Information provided by Billy Ghansah, Oil Palm Expert, Socofin, Brussels.

⁵⁸ OPUL considers that environmental protection works in their favour because it enhances its international reputation.

⁵⁹ The IMS has 11 members representing MAAIF, NEMA, the National Forest Authority (NFA), the PMA donor subgroup, the National Organic Agricultural Movement of Uganda, KDLG, OPUL, KOPGT and the PCO.

fertilizer. Studies of the growth and yield of oil palm in four ecological areas have been carried out and the potential for oil palm growing in other areas has been identified. A general challenge in conducting on-farm trials is proper record-keeping by farmers of the weight of ffbs harvested.

72. COREC has been active in disseminating information in a number of ways: brochures and posters on oil palm-growing and palm oil-processing have been distributed, and its staff has been involved in awareness-raising and training sessions. The project has undoubtedly increased interest in oil palm research at COREC. However, to date, this has not been reflected in increased government funding of oil palm research.

73. **Provision of social/public infrastructure.** The Government has procured a new 120t ferry, rehabilitated a second ferry and constructed ferry landings, which greatly increased commercial traffic to the island. It has also upgraded the 68-km spinal road on the island and built additional feeder roads. Other infrastructure installations include a telecommunications mast, radio stations, and water and electricity. The Government recently negotiated a US\$45 million investment in infrastructure on the island with InfraCo (see para. 185).

B. Traditional Oilseeds Subproject

Factors Affecting Implementation Results

74. Implementation of this subproject has been affected by several factors. First, there was **increased exposure to insurgency**. The six pilot districts were relatively distant from the main insurgency areas further north but the neighbouring expansion districts were more at risk, with Gulu, Kitgum and Pader particularly affected. During 2002-2003 the LRA moved further south into Apac, Lira, Soroti, Kabermaido and parts of Katakwi. In Lira, 15 subcounties were affected directly or indirectly; some 328,700 people were internally displaced and other communities had to host displaced people.

75. Many of the VODP beneficiaries were forced to flee to IDP camps and were away from their homesteads and farms for two to three years, returning only between 2005 and 2007. Some of these families continued to farm their land from a distance, focusing on food crops and returning to the camps at night; but they were naturally reluctant to invest in new farming practices at this time. Even some of the more peaceful districts were affected since they had to house refugees from the areas affected by conflict. For example, one of VODP's more successful farming groups in Masindi consists of Acholi farmers who had fled from Gulu.

76. Second, there was vulnerability to drought and floods. These natural hazards have been increasing recently, and have affected the productivity of the cash crops promoted by the project. Drought was a problem in 1999, 2000 and 2002, and in the three consecutive years 2006-2008. In September 2007 widespread flooding in the region affected some 300,000 people and required international humanitarian assistance.⁶⁰ The increased incidence of drought on the north-eastern border with Kenya has also made the neighbouring districts more vulnerable to agricultural disruption and cattle rustling by the *Karamojong* herdsmen and warriors. For example, in 2000-2002, some of the farmer groups formed by the project in Soroti, Lira and Katakwi were disbanded because of displacement by the *Karamojong*.

77. A third factor was the **subdivision of districts**, which has been taking place as part of the decentralization process.⁶¹ In 2000, Kitgum, Mbale and Soroti were subdivided and in 2005/2006 a further eight districts⁶² were affected. In the process, staff, equipment and resources were taken from

⁶⁰ Information from World Food Programme website.

⁶¹ Decentralization has been an ongoing process since 1992; it is enshrined in the 1995 Constitution and the Local Government Act of 1997. Functions, powers and services have been transferred to locally-elected councils.

⁶² Apac, Lira, Katakwi, Kumi, Pallisa, Mbale, Kapchorwa and Gulu.

the ‘mother’ district to set up the new districts, leaving the former very depleted. This proliferation of districts meant that VODP was forced to liaise with 23 districts instead of 14, which increased operational costs.



Hand ram press, Masindi (see para. 96)

Source: IFAD Evaluation Mission, 2009

78. Fourth, the project was affected by the **reorganization of agricultural extension services**. The public extension system has been restructured several times since the mid-1990s. The system was devolved from central to local government in 1998, and a new, semi-autonomous National Agricultural Advisory Services agency (NAADS) was set up in 2001 as part of the PMA. In an attempt to make extension services more efficient, locally appropriate and demand-driven, NAADS was to subcontract private extension agents to supply technical advice and inputs to organized farmer groups. The DAOs were to have a supervisory rather than operational role, which implied a retrenchment of field extension workers. This restructuring caused anxiety and affected the performance of the field staff. However, the system was only partially implemented and there were problems with what took place.⁶³ As a result, there has been a parallel extension service in most of the districts while the budgets and staffing of many DAOs have declined dramatically. For example, in Lira (which was also affected by district subdivision), the number of extension staff fell from 30 in 2004 to ten in 2008.

79. The NAADS system asks farmers to adopt an ‘enterprise approach,’ focusing on a particular product line (e.g. citrus, bees, poultry), and to limit themselves to three priority ‘enterprises’ each year. Since this offers the promise of extra inputs for demonstration purposes (e.g. seeds, planting material, oxen), it is not surprising that farmers opted for new products that would assist their strategy of diversification rather than choosing further extension support to sunflower.⁶⁴ The net effect of all these changes is that the technical and financial resources provided to support sunflower growing through the DAOs significantly declined and were not offset by alternative services through NAADS.

80. The final factor that affected project implementation was **the emergence of an alternative sunflower production/milling system**, led by the Mukwano Group of Companies. In 2004, Mukwano started contracting farmers to grow an imported sunflower hybrid seed (PAN 7351), which was first milled in Kampala and later at a large new mill in Lira.⁶⁵ Mukwano also supplied extension services to

⁶³ See M.N. Mangheni (ed), *Agricultural Extension in Uganda*. Kampala 2007.

⁶⁴ Farmers were requesting support for other enterprise lines such as citrus, bee-keeping and agroforestry (mission interviews with extension agents and farmers).

⁶⁵ It is estimated that the company now accounts for about 50 per cent of vegetable oil production in Uganda (information supplied orally by BIDCO).

its contract farmers, with support from USAID. The farmers had to purchase the seed from Mukwano and sell the production back at an agreed price, but it produced a higher yield and commanded a higher price than the open-pollinated variety (OPV) 'Sunfola' being distributed by VODP and was thus more profitable for farmers.⁶⁶ At the time of the mission, farmers in many of the VODP districts were producing for Mukwano and had stopped growing 'Sunfola.' Moreover, the popularity of the Ram press declined as it could not be used for processing the hybrid variety because of its hard shell. The mission heard that competition among the main stakeholders associated with the two sunflower products became quite vitriolic at one time, although relations between them have now improved. In summary, both the market for sunflower seed and the supply of extension services became more diverse and the VODP-supported products became less attractive for farmers.

Subproject Activities and Outputs

81. The main activities of this subproject were: adaptive research; seed multiplication and distribution; general extension and support; cottage processing; and development of food standards. The implementation results for this subproject are detailed in appendix 4. Here, only the general points are reported.

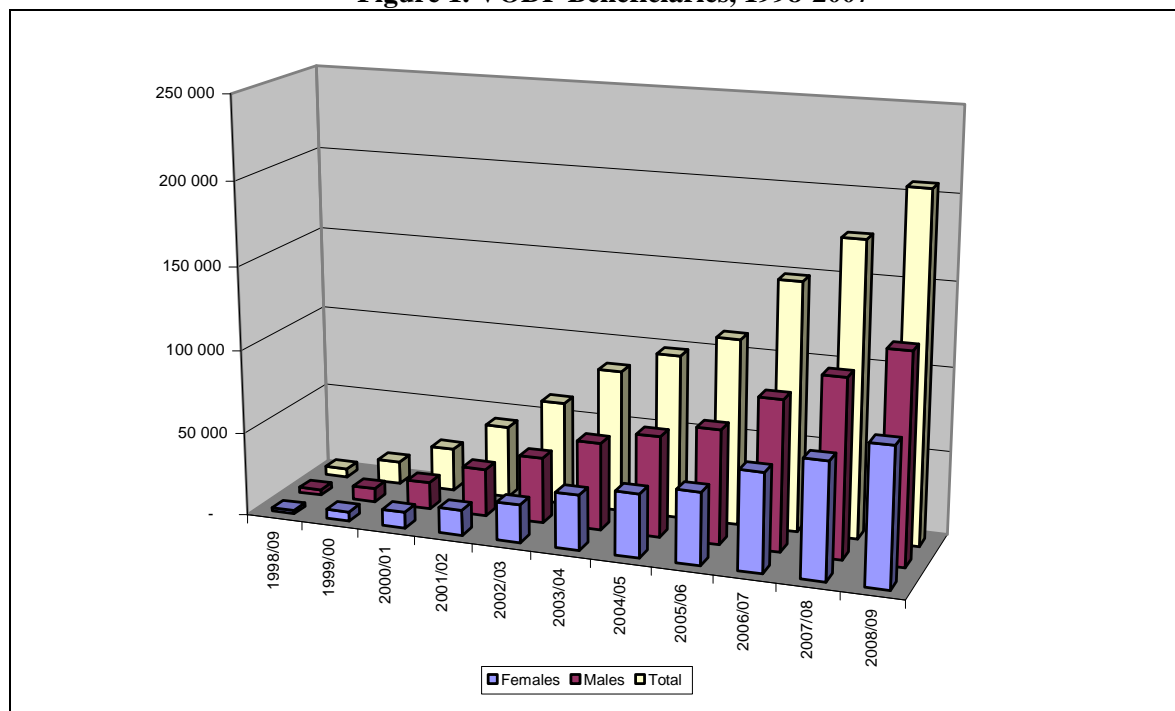
82. **Beneficiary coverage.** The subproject substantially expanded its geographic coverage by increasing the number of districts and subcounties where it worked. Between 1998 and 2009, the number of subcounties covered rose from 24 to 226. The number of beneficiaries supported by VODP under the traditional oilseeds subproject expanded from 5,149 in 1998/1999 to 206,943 in 2007/2008.⁶⁷ In 2008, this would have represented about one quarter of all households in the project area, assuming one beneficiary per household. Over the whole period, the project worked with many more farmers but the cumulative figure is not presented here because of possible double-counting.⁶⁸ The proportion of women remained relatively constant at 39 per cent, although there were variations among districts. Women were particularly affected by the security situation, and the numbers were lower in the relevant districts and years.

⁶⁶ Mukwano made the imported hybrid seed available on the open market in 2008, and has gradually withdrawn from contract farming.

⁶⁷ A project beneficiary is defined as any individual who has received a service from the project (e.g. has participated in a training, demonstration, field day or farm visit). The majority are cultivating sunflower or other vegetable oil crops or have grown them at one time.

⁶⁸ See appendix 2.

Figure 1. VODP Beneficiaries, 1998-2007



Source: Project M&E data

83. **Adaptive research.** The purpose of this element – to be carried out on two NARO research stations and farmers’ fields – was to increase the supply of improved seed and generate new knowledge about appropriate agronomic practices for oilseeds in the zone. The research mainly focused on the improvement of existing oilseed varieties, development of new varieties, and the testing, release and purification,⁶⁹ production and distribution of foundation and breeder seed. Several varieties of groundnut, sesame and hybrid sunflower were released, but no OPV alternative to ‘Sunfola’ had been developed at the time of the evaluation mission. A revolving fund was established based on income from the sale of the soybean foundation seed to support future activities. However, although the researchers did release new varieties of the different oilseeds, they were slow to do so because of the lack of genetic material and delays in receipt of funds. The fact that no local OPVs of sunflower were released during the ten years of the project ultimately limited impact on the scale of production and productivity of the project’s main cash crop.

84. There was much less emphasis on improving agronomic practices. Some research on soil fertility and fertilizer application was carried out, but this was mainly for the evaluation of varieties and there was little follow-up in terms of formulation and dissemination of recommendations to farmers. No work seems to have been carried out on bird-scaring devices, management of manual and/or animal ploughing systems or integrated pest management, and very little on intercropping and crop rotation. More could have been done on fertilizer use and crop rotation to offset the potential decline in soil fertility. The initial breeding work has typically been on-station, with final testing of varieties developed on farmers’ fields. However, there appears to have been limited coordination and collaboration with the extension staff and farmers, thus limiting the spread of learning beyond the researchers and the application of new knowledge.

85. **Seed multiplication and distribution.** This element was intended to address the chronic shortage of oil seeds in Uganda. UOSPA was to carry out seed multiplication and distribution and also

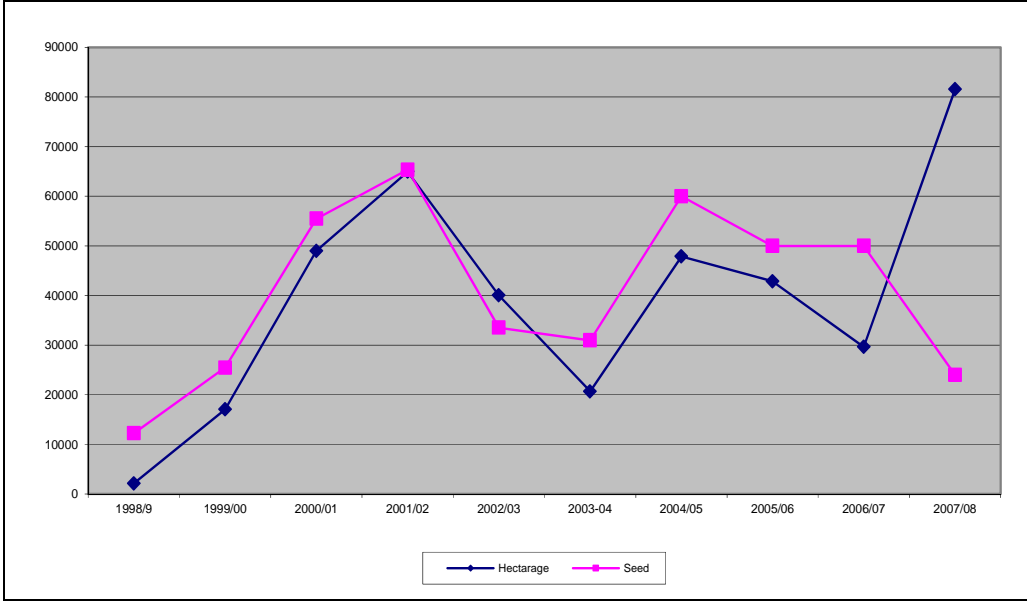
⁶⁹ Varieties that are imported or developed in Uganda must undergo field tests over a number of growing seasons and the results (yield, disease tolerance, stability, etc.) must be accepted by the variety release committee before being marketed as certified seed. Purification (re-release) is necessary when a previously released variety becomes vulnerable to new strains of disease or loses its resistance to disease.

train extension staff and farmers in sunflower cultivation. Under the MOU with VODP,⁷⁰ UOSPA multiplied the foundation seed ('Sunfola') from NaSARRI using contract farmers and delivered it to the DAOs, who then distributed it to beneficiaries. Since 'Sunfola' is an OPV, farmers can usually retain some for use in subsequent seasons, though it should be replaced after two to three years to prevent degeneration. UOSPA has also multiplied and distributed soybean, using foundation seed from NaCRRI.

86. Initially, the project was selling the seed to farmers but, starting in 2002/2003, it was distributed free-of-charge under the Poverty Action Fund (PAF) as part of a government strategic poverty intervention. Vulnerable groups, including women, youths, the elderly and the displaced, were to be targeted. This was meant to be a short-term intervention since it was not PMA policy to distribute free inputs, but the project has continued to distribute free seed. However, it gradually reduced the amount distributed to the districts and encouraged a more sustainable seed supply system by diversifying its procurement from other private companies besides UOSPA, networking with the Uganda National Agro Dealers' Association (UNADA), and mobilizing seed companies, millers and UOSPA to increase the supply of seed, either locally or through imports.

87. A total of 548,721 kg of 'Sunfola' seed was distributed to farmers between 1998 and 2008.⁷¹ Seed distribution increased steadily until 2004/2005, after which it stabilized at a slightly lower level and then fell by half in 2007/2008 (see Figure 2 below). This reflects VODP's policy of gradual withdrawal of free seed and farmers' switching to the Mukwano hybrid seed. Undoubtedly, the increased supply of improved seed to farmers increased yields and directly expanded sunflower cultivation. Over the project period, the area planted to sunflower with VODP support rose from 2,102 ha in 1998/1999 to 81,548 ha in 2007/2008, although there were variations in some years and in some districts.

Figure 2. Area Planted with Sunflower and Seed Supply (VODP beneficiaries)



Source: Project M&E data

88. There is, however, conflicting evidence on the effectiveness of the system for seed multiplication and distribution. On the one hand, the performance of the seed multipliers was reported to be improving with UOSPA training and increased scrutiny by NaSARRI. On the other hand, there are references to inadequate follow-up and supervision of the seed multipliers by the National Seed

⁷⁰ The MOU with UOSPA was for 2000-2003, after which the project sourced improved seed from other suppliers, along with UOSPA.

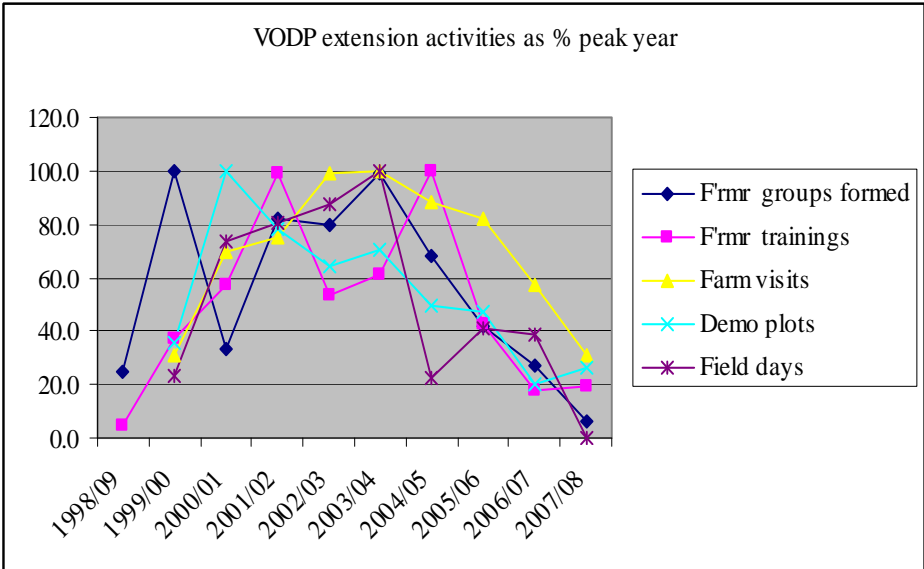
⁷¹ A very high proportion of this was distributed in the early years to two of the pilot districts, Apac and Lira, which accounted for one third of total seed distribution, and over half of that was distributed between 2000 and 2002.

Certification Service. Some farmers complained about untimely provision and inconsistency in the quality of the seeds supplied. As a result, they were returning to planting local varieties, which were subsequently contaminating the ‘Sunfola’ and reducing its yields.⁷²

89. VODP’s policy on and justification for the initial distribution of free seed is unclear and is not mentioned in the annual and supervision reports. Its introduction in 2003 was the result of national government policy rather than a project decision. There is little clarity about how the targeting criteria were applied and when this practice would be phased out. By 2006, the proportion of farmers receiving free seed had risen to 60 per cent despite the project’s intention to reduce it.⁷³ Around the same time, Mukwano’s increasing sales of the PAN 7351 hybrid clearly demonstrated that farmers were prepared to purchase the more costly seed. The mission was not able to form a clear picture on whether the distribution of free seed during these years had discouraged input dealers from increasing their supplies. Although in later years the project did reduce its supplies, diversify its suppliers and began to network with private seed suppliers, it was probably too little too late. The fact is that seed supply remains a problem.

90. **General extension and support.**⁷⁴ This activity was necessary to provide technical support to farmers with the cultivation of the new crop (sunflower), to overcome their reluctance to growing it because of fears that it would exhaust the soil and reduce yields of subsequent crops, and also because of their past experience with poor market outlets and low prices. Most of the effort was concentrated on sunflower because of its high oil content, being less prone to disease, more amenable to cottage processing, and having good marketing opportunities. The project also promoted improved agronomic practices in relation to soybean, sesame and groundnut. Extension advice to farmers was rapidly scaled up because of its strategy of working through the DAOs with organized farmer groups, and oilseed farmers have definitely had more access to extension advice as a result. The increase in sunflower cultivation also attracted other providers of extension services such as Mukwano (which has sometimes led to confusion at the field level). However, the degree of VODP’s extension effort has varied over the period and tailed off in recent years. Figure 3 below presents the proportion of extension activities each year expressed as a percentage of the peak year for that activity. It shows that that all extension activities peaked in the early years, fluctuated in intensity in the middle years and declined after 2005/2006.

Figure 3. VODP Extension Activities as Percentage of Peak Year



Source: Project M&E data

⁷² IAS, p. 19, and mission interviews.

⁷³ IAS, p. 18, and Table 3.3.

⁷⁴ All extension activities reported in this section are based on a standardized district definition for the whole project period (the split-off districts were re-amalgamated with their original ‘mother’ district). See appendix 2.

91. Over the ten years of project operation, a cumulative total of 5,906 new farmer groups have been formed. Many of these groups were formed in the first two years as a result of intense publicity efforts, but then the numbers fell because of problems with insurgency and cattle rustling in three of the six pilot districts. They rose again to a year-peak of 1,037 in 2003/2004, after which they gradually fell to only 66 in 2007/2008 (see Figure 3). There seems to have been a marked increase in some districts in some years, reflecting particular mobilization efforts.⁷⁵ Particular efforts were made to encourage women to join the farmer groups. Over the project period, 28 per cent of group members were women and there were some 'women's groups' (who often had male members as well). This reflects government policy on affirmative action and encouragement by extension staff. The decline in the rate of new group formation suggests that saturation may have been reached, as by now many project areas have existing farmer groups supported by a variety of other agencies as well as VODP. A total of 8,542 training sessions were carried out, at which 40 per cent of participants were women. Training modules included group development and dynamics, agronomy, post-harvest handling, cottage processing, farming as a business, savings and credit, and PPM&E. In all, 7,944 demonstration plots were established and there were 53,388 farm visits and 1,393 field days. However, here again, the extension effort was concentrated in the early years and then declined.

92. The concentration of extension activities in the early years was probably because farmer groups were just being started up and quickly needed training across all the stages of the production cycle. In the middle years, the work was affected by problems of insecurity, drought and floods in some districts. However, the decline in the extension effort during the last three years is very noticeable and seems to have been common to all the districts.⁷⁶ The evaluation was not able to ascertain the reasons for this, although it may be assumed that problems related to the transitioning of the new districts, including reduced extension staff in the districts affected, declining DAO resources, restructuring of the extension system,⁷⁷ and the possible end to the project may have played a part.

93. The concentration of effort in the early years meant that the pilot districts benefited disproportionately. Table 2 below shows that, on average, the six pilot districts absorbed two thirds of the total extension effort and two of them absorbed one third of it. Possible reasons for the concentration in Apac and Lira may include their larger populations⁷⁸ and more extensive oilseed cultivation, the fact that the project had been working there longer and had expanded into more subcounties, the high concentration of effort there during the early years, and the fact that UOSPA and AT-U were already active there.

⁷⁵ Apac and Pallisa in 2001, Katakwi in 2002, and Kabermaido in 2003.

⁷⁶ The PCO argues that the subproject was increasingly focusing on activities that would increase sustainability, such as farmer marketing associations, savings and credit and support for non-production value-chain activities. However, these activities should have presumably maintained the level of farmer training.

⁷⁷ The IAS comments that the restructuring of local extension services had reduced extension delivery because of the 'transient nature of some local government extension workers and conflict in work schedules, especially in new districts.' (IAS, p. 10; see also comments at p. 20).

⁷⁸ Lira and Apac accounted for 47 per cent of the total pilot district populations (see footnote 32).

Table 2. Concentration of Extension Activities in Pilot Districts

Project Inputs	Percentage of Total Extension Activities in Six Pilot Districts	Percentage of Total Extension Services in Lira and Apac Districts
Seed distribution	60	34
Groups formed	61	30
Trainings	70	36
Demonstration plots	75	34
Farm visits	61	29
Field days	75	42

Source: VODP M&E data

94. The VODP-supported extension advice has been appropriate, effective and appreciated by the farmers. However, they regretted that it was not as frequently available as they would have wished and felt the need for more advice on storage, marketing, packaging and labelling of cottage processed oil in order to meet requirements beyond local communities. The evaluation concurs on the need to cover these aspects, but it also considers that more attention should have been given to soil fertility issues, given the ongoing intensification of sunflower production, continued practice of intercropping and limited use of fertilizer.⁷⁹ Such issues need to be addressed urgently if the sustainability of sunflower cultivation is not to be undermined. However, this is unlikely to happen in the light of the reduction in VODP-supported extension, the lack of support from NAADS for oilseed cultivation, and the short-term focus of many private extension schemes.

95. **Cottage processing.** An MOU with AT-U was in place between 2000 and 2003,⁸⁰ under which it was to distribute Ram presses to farmer groups for demonstration purposes and train extension staff, farmers, rural blacksmiths and rural sales agents in the operation and maintenance of the machine and in business and finance aspects. A total of 343 Ram presses were distributed for demonstration but groups were also encouraged to contribute towards the cost and the proceeds were used to buy machines for other groups under a revolving fund scheme (e.g. in Soroti and Masindi). Some individual farmers also purchased Ram presses on their own initiative.

96. Initially, the Ram press proved to be important as a source of value addition, both for domestic consumption and for local sales of oil. However, it was not without problems and currently there are many Ram presses in disuse. It suffered a high depreciation rate and a lack of spare parts, which local artisans found difficult to fabricate.⁸¹ The operation of the Ram press is very arduous and it is difficult for women to use, which has created problems for some women's groups. The cost of the machine rose rapidly due to the rising price of imported materials. There were some complaints about the quality of the processed oil.⁸² The machine could not process the harder-shelled hybrid variety that farmers were increasingly growing for Mukwano; and, finally, the Ram press has a low oil extraction rate, which soon created a bottleneck once local supplies of seed had expanded. However, the Ram press remains appropriate in remote areas without electricity where many farmers are satisfied with it,

⁷⁹ Access to fertilizer remains problematic for Uganda, which must import the fertilizer it uses. The country's landlocked position raises costs by 10-15 per cent for this highly perishable commodity, which puts it beyond the financing capacity of IFAD target group farmers.

⁸⁰ AT-U had been promoting Ram presses in the area since 1994, supported by USAID and others.

⁸¹ When AT-U withdrew from the area in 2003 it arranged for local stockists to source the machines and spare parts from Kampala. But the system did not work because of low demand.

⁸² According to the former AT-U programme officer, some consumers had voiced complaints and sent the oil off for testing.

and in other areas some farmers still wish to process their own oil despite producing for Mukwano because of the benefits to domestic consumption and local income generation. The project should have anticipated the need for more efficient machines and found alternative channels for sourcing them from relevant dealers in order to expand and deepen the cottage-processing element of the project.

97. **Development of food standards.** UNBS was established in 1983 as a statutory body of MTTI and mandated to handle food quality standards. An MOU was signed between VODP and UNBS in 2003 to improve the quality, safety and competitiveness of the vegetable oil subsector. VODP provided state-of-the-art chromatography equipment and staff training for the development of laboratory analytical services. Twenty-eight product-quality standards have been developed for sunflower, sesame and groundnut, and other standards are under development for post-harvest handling, storage, hygiene and labelling. Guidelines for good manufacturing practices by small and medium vegetable oil mills have been drafted and a vegetable oil processing quality control manual prepared. This is a commendable achievement in a short space of time.

98. The process of developing food standards involves testing, monitoring and full certification. Thirty-five oil mills are routinely inspected every two-to-three months and there is monthly testing of vegetable oil quality during the harvest season. Although currently no mills are certified, three millers have had preliminary quality audits and certification is expected in the near future. However, certification comes at a cost, which many small millers are not prepared to pay,⁸³ and enforcement of standards is difficult because of limited resources, especially personnel. Therefore UNBS has focused more on self-regulation through training, technical support and public campaigns, working with the sector associations and municipal councils. Over 100 local government staff, millers, machine operators and traders have participated in regional sensitization and training workshops about food standards. UNBS is also assisting the Northern Uganda Oil Miller’s Association (NUOMA) with the development of a code of practice for the subsector.

The strategy of promoting self-regulation in terms of food hygiene and production processing through awareness-raising and training was appropriate given the constraints on enforcement of the standards, the high costs of certification for small millers, the impracticality of certifying Ram press operations, and the often conflicting goals of UNBS and the decentralized local authorities where the latter are interested in generating revenue. UNBS’s ongoing collaboration with NUOMA in the preparation of a millers’ code of practice is to be welcomed as it is more likely to promote ownership of the code, self-regulation by the stakeholders and self-monitoring of defaulters than externally imposed standards. The existence of a code of practice will also enhance the marketability of the product, as is the case with a standard.



The most successful essential oil crop was citronella, which is now grown, processed and sold by almost 800 farmers. However, bottlenecks emerged in the distilling and marketing processes that would impede large scale production at the present time.

Source: IFAD Evaluation Mission, 2009

⁸³ There is an initial charge of UGX 800,000 (about US\$410), plus the same as an annual fee thereafter. The three tests required for certification cost UGX 150,000 each (US\$77).

99. **Other activities.** The project organized meetings with millers through UOSPA and its newly-formed affiliate, NUOMA, to address problems of seed supply and marketing. Extension staff have been encouraging group marketing through training on produce bulking, quality control and market-access strategies. In addition, the project has also encouraged savings activities among farmer groups through sensitization events and has linked interested groups to specialized credit organizations or microfinance institutions. Most of the farmers have joined the SACCOs. The project has also organized publicity events to promote vegetable oilseeds, including participating in World Food Days and agricultural trade shows. These were all relatively small initiatives.

C. Essential Oils Subproject

100. The aim of the essential oils subproject was to identify high-value essential oil crops that were already being produced in Uganda on a limited scale but had high commercial potential and were suitable for smallholder production, especially in areas with few other cash crops. The emphasis was on the testing and verification of this potential, with the identification of suitable cultivars, production and distribution of improved planting material, and piloting of distilling and marketing.

101. This is a relatively small subproject, which was weakly formulated at appraisal and lacked attention from visiting supervision missions because of the larger scale and complexity of the other subprojects. The research covered citronella, lemon grass, geranium, shea nut and *Prunus Africana*. Particular successes have been achieved with citronella: 784 farmers have been trained in its cultivation, distilling facilities constructed, local sales achieved and a potential international buyer identified. Work with geranium, *Prunus Africana* and shea nut were less successful either because of problems with plant disease, unrest in the areas under cultivation or low production potential. Despite this, 171 farmers are continuing with shea nut and 40 with *Prunus Africana*, making a total of 995 beneficiaries involved in essential oil crops (see appendix 4).

102. The on-station research has mainly consisted of screening for higher yields, selecting improved varieties and distributing them to farmers. Substantial progress was made in screening for oil content and identifying appropriate cultivation practices, particularly as regards citronella. The on-farm trials have been carried out in an appropriate manner, in close cooperation with the farmers. The degree of engagement by the research staff with the farmers and their involvement in direct extension activities is commendable. The DAO staff have been involved in the work to a lesser extent but have acquired basic knowledge that they can pass on to new producers.

103. The piloting of distilling and marketing processes yielded important information about value-chain bottlenecks. Citronella cultivation expanded rapidly and sometimes there was an oversupply to the distilleries. There were high transport costs from farm to distillery, low availability of fuel and water for the distilling process, limited distilling capacity, and a lack of regular market demand of a size that matched the available supply.⁸⁴ As a result, some farmers have withdrawn from the project. Nevertheless, others are enthusiastic about the crop because of its low labour requirements and the high returns realized so far. Better market opportunities have been recently identified in South Africa, which offer the possibility of putting the project on to a more commercial footing. However, this prospect is still precarious. In the meantime, farmers' expectations need to be managed well in order to avoid disappointment.

D. Note on Subsectoral Advocacy

104. This activity was originally part of the institutional support component, as part of VODC's role. As well as providing project oversight, VODC was to promote the interests of the vegetable oil subsector through coordination, information exchange, priority setting, policy advice and mobilization of resources for R&D. Undoubtedly, there is an important role to be played in this respect although it was probably premature at the time, given the immaturity of the subsector, the fragmented nature of the value chain and mutual suspicion among some of the players. VODC did not fulfil this intended

⁸⁴ Potential clients want either very large amounts that the farmers cannot satisfy or small amounts that limit their profitability.

role and it is not clear that it was the appropriate institution to do so. There was a conflict of interests between the steering and subsectoral support roles: the former required a small dynamic membership with strong government representation and commitment to the project; the latter required a larger, more open membership and a neutral relationship vis-à-vis all projects in the subsector.

105. The subsectoral advocacy role has been recently assumed by a new institution, set up in 2007, which has a more appropriate membership and style of functioning. The OSSUP acts as a platform for information exchange, networking and coordination, influencing policy formulation and advocacy for the subsector. All actors in the value chain are represented (farmers' organizations, government, service providers, large and small millers, input dealers, commercial banks, donors, NGOs, researchers, UNBS and VODP). At this stage of its development, it is more of an advocacy than a regulatory organization (in contrast to the Uganda Coffee Development Authority (UCDA) or the Cotton Development Organization (CDO), and its funding by SNV – although committed for the medium term – is quite small. However, it has already had major impacts in promoting a more consensual approach among the various stakeholders and has been effective in identifying common constraints such as lack of seed or unhygienic production facilities. Moreover, the 'Platform' is well rooted regionally, where farmer participation is more feasible. In sum, this kind of organization, with its open membership and wider representation of interests, is more appropriate than VODC as a subsectoral support mechanism at this stage of its development. As it gathers strength, it may evolve into a more formal structure such as the UCDA and the CDO.

E. Project Management, Coordination and Oversight

106. The PCO was set up in 1998 with the appointment of a project coordinator and secondment of five staff from MAAIF. The staffing level has since increased to the current 15 members. The office is located in Kampala because of the need to coordinate with many government and non-government stakeholders whose head offices are there. However, MAAIF is some 35 km away in Entebbe where many of the seconded staff still live, and this has involved high transport costs and commuting time. As the technical staff are seconded, salary levels may not be commensurate with current and expected levels of responsibility. Nevertheless, the project has been managed efficiently and with enthusiasm, and has enjoyed strong moral support from MAAIF.

107. The PCO has performed its coordination function admirably, not only in the efficient transfer of funds and but also in providing technical backstopping, training on M&E, and support through public relations and publicity. This was particularly important in the oil palm subproject when it was suffering delays in implementation and negative publicity. The PCO has also performed an effective liaison role between Government, the private sector and IFAD. See also comments at paras. 130-131.

108. **VODC.** Because of the project's unique Public-Private Partnership (PPP) structure, involving a partnership between the Government and BIDCO and some non-governmental implementing partners, it could not be overseen solely by MAAIF. Therefore a more diverse multistakeholder steering and oversight mechanism was needed. As part of its functions, the VODC (which was set up in 1999 and has seven members⁸⁵) was charged with steering and guiding project implementation. In this capacity it has approved plans and budgets, provided technical and operational guidance, visited the two project sites, and advocated for the project in a number of public fora. The PCO acts as secretariat of VODC.

109. VODC has performed its oversight role very effectively. By keeping a close eye on project plans and finances, it has provided a strong accountability function; and by bringing together a range of private- and public-sector technical expertise, it has provided a good forum for exchanges of views on technical matters. Its scrutiny of project progress through field visits and meetings with beneficiaries has enabled local problems to be raised and then resolved at a high level. Involvement in the VODC also promoted project ownership among the members, who were all high-ranking officials within their respective institutions. During the difficult period of external criticism, the VODC provided an important source of moral support and in countering negative publicity.

⁸⁵ Four members represent government ministries and agencies (MAAIF, MTTI, MFPED and NARO), two represent the private sector (OPUL and UOSPA), and one represents the farmers (UNFFE).

F. Project Costs and Compliance with Schedules

110. **Project budget.** As mentioned earlier (para. 35), the redesign of the oil palm subproject entailed a sharp increase in funding from the Government and the private investor. The IFAD loan remained at SDR 14.35 million, although variations in the SDR/United States dollar exchange rate led to increased dollar funding for the project. The Government's allocation, however, increased from US\$3.8 million to US\$12 million and cofinancing from the private investor went from US\$33.1 million to US\$120 million.

111. **Project extensions and loan reallocations.** The delay in start-up of the oil palm subproject necessitated several loan extensions. The project completion and loan closing dates have been extended four times, the latest in April 2009 with Executive Board approval. Given the different start-up dates of the two main subprojects, reallocations among loan categories were effected in parallel with the extensions mentioned above. These reallocations shifted levels of funding between categories: loan categories I and II (vehicles and equipment, and civil works) were reduced, while operating costs rose significantly.

112. **Disbursements.** Overall expenditure on the two subprojects has been within the budget limits. However, there have been major differences in government and IFAD disbursements associated with the oil palm subproject. There has been an increase in commitments and disbursement by the Government, while IFAD disbursements have lagged behind schedule (see table 3 below). The increased government expenditure on oil palm resulted from the high costs of the new ferry, the purchase of private land on Kalangala and efforts to counteract negative publicity. IFAD's low disbursement rate (64 per cent) is mainly attributable to the slow enrolment of smallholders and outgrowers in the oil palm subproject.

Table 3. Financial Performance by Financier by Subproject (US\$'000)

Subprojects	IFAD Loan			Government			Beneficiaries			Total		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
Oil palm	10,790	5,393	50	2,080	6,334	305	4,000	3,200	80	16,870	14,927	88
Traditional oilseeds and essential oils	6,640	4,976	75	1,360	1,346	99				8,000	6,322	79
Institutional support	2,480	2,284	92	340	834	245				2,820	3,118	111
Total costs	19,910	12,653	64	3,780*	8,514	225	4,000	3,200	80	27,690	24,367	88

*The Government's contribution was increased to US\$12 million after the oil palm revisions in 2000.

Source: IFAD Supervision Report, December 2008, table 1B

113. **Reclassifying project expenditure by subproject.** VODP's financial reporting, exemplified in table 3, has followed the original project component structure, which is misleading because it does not clearly distinguish between the three subprojects. As mentioned in para. 29, the traditional oilseeds and essential oils subprojects are combined in the second component, and the institutional support component combines project management and coordination costs with operational activities associated with NARO, NEMA, KOPGT and UNBS. In order to clarify the real subproject costs, the PCO re-examined all project expenditures since 1998 and reclassified them according to their contribution to the specific subprojects, with a clearer separation of PCO coordination expenditures. The results show that the oil palm subproject accounted for approximately 29 per cent of total project expenditure (constant United States dollars); the traditional oilseeds subproject for 44 per cent; the essential oils subproject for 3 per cent; and project coordination for 23 per cent (this is further explained in para. 149).

114. **Compliance with schedules.** Apart from major delays in the oil palm subproject and minor delays in the establishment of MOUs with implementing partners, the rest of the project was implemented on time. Compliance with other schedules for reporting, supervision and audit has been satisfactory. AWP/Bs, financial statements and audits appear to have been in line with the provisions of the loan agreement, and there is ample evidence of oversight in this regard by the regularly scheduled supervision missions.

V. PROJECT PERFORMANCE

115. Overall, the project scores well in terms of project relevance and effectiveness but less well on efficiency. There were major differences in the performance of the two main subprojects: while there were substantial achievements in the traditional oilseeds subproject, the redesign and delay of the oil palm subproject reduced the project's overall effectiveness and efficiency.

A. Relevance

Policy Relevance

116. **To the Government.** The VODP is highly relevant to government policy, both on the modernization of agriculture as a source of growth and poverty reduction, and on fostering partnerships with the private sector in that process. It is also relevant to its objectives of promoting import substitution and export diversification (see para. 23 above). The Government's policy objectives in this respect have remained consistent throughout the project period. Conformity with these objectives is reflected in the high degree of commitment to the project (see para. 248) and the fact that oil crops promoted by the project have gained prominence in political discourse and entry onto NARO's crops priority list. The project has also increased the Government's tax base, which is part of its long-standing policy to improve government revenue collection.

117. **To IFAD.** By working with poor smallholder farmers in all subproject areas, VODP is highly relevant to IFAD's overall corporate goal. In 2005, the Fund developed a strategy for partnership with the private sector through which it would seek to forge develop partnerships with a range of private-sector operators, bringing a bottom-up approach to working with this sector.⁸⁶ It aimed to perform a catalytic role in promoting dialogue between the public and private sectors and in leveraging higher levels of investments. VODP is the first and only large-scale PPP of the kind envisaged under this strategy.

118. Since 1990, IFAD's support to Uganda has focused on two areas: improved production of export and import-substituting crops, and the emergence of producer and commodity associations, with particular attention to women's groups. IFAD has prepared two Country Strategic Opportunity Papers (COSOPs) (1998-2004 and 2005-2008) and is in the process of developing a third. The current country strategy works within the framework of the Government's PEAP and the PMA by supporting several national-level programmes⁸⁷ and the more regionally-specific VODP. Through these projects and programmes, IFAD places specific emphasis on marketing and agroprocessing, on interventions in the northern and eastern regions where the incidence of poverty is highest, and on partnerships with the private sector, NGOs, national and district-level governments and other donors.⁸⁸ VODP is an integral part of the country strategy.

119. **To donor policies and programmes.** The Government has promoted donor coordination and alignment since the early 1990s. It has encouraged the development of joint sector working groups and pooled funding mechanisms, and Uganda was the first country to see the adoption of a joint assistance strategy by several major donors (2005). IFAD contributes actively to policy dialogue within the

⁸⁶ IFAD's Private-sector Development and Partnership Strategy. April 2005.

⁸⁷ The NAADS extension system, rural infrastructure and marketing, decentralized district livelihoods support and rural finance programmes.

⁸⁸ Uganda COSOP, September 2004.

donor working group on agriculture,⁸⁹ including that on the vegetable oil subsector. At the start of the project, several donors were operating in the north-east of Uganda and supporting traditional oilseed production, but most of these projects finished at the end of the 1990s.⁹⁰ FAO and the World Bank were involved in the initial project appraisal process and the Bank was cooperating institution for the first five years; but they are no longer involved. However, the success of sunflower has attracted the re-entry of other donors, such as USAID, SNV and Danida, into the vegetable oil subsector although they are working with other partners (input suppliers, millers and the district farmers' associations). There is room for improved coordination and information-sharing with these other donors, as they are all now adopting a value-chain approach and a private-sector focus. No other donors have been or are currently working on oil palm.

Relevance to the Private Sector

120. In the face of high income-elasticity of demand for vegetable oil and the growing prosperity of Uganda and its neighbours, investment in the subsector was bound to offer attractive returns to the private sector. For oil palm development, lack of access to land was a major constraint because of the high proportion of public land (e.g. gazetted secondary forests) and uncertain rights on private land. A partnership with the Government that would resolve the land problem was therefore attractive. However, some form of smallholder involvement was also necessary because of the large numbers of *Kibanja* tenants occupying the available private land. Support from a donor like IFAD would provide financial, institutional and technical support to such farmers, at least in the early years. However, few local investors had the required expertise and financial capability to engage in this project; and even a large multinational consortium such as that put together by BIDCO regarded the project as a high risk. Nevertheless, the substantial increase in cofinancing supplied by the private investor is a good measure of the project's relevance.

121. As far as sunflower was concerned, the major constraint for private millers was shortage of the raw material arising from bottlenecks in the value chain. Once seed production began to expand, markets developed and numerous private operators (input dealers, transporters and millers) became involved. The project was relevant to these private operators, albeit indirectly rather than as the product of specific partnerships.

Relevance to the Needs of the Rural Poor

122. Wide consultations were undertaken as part of the long, drawn-out appraisal process between 1990 and 1996 during which farmers, central government and district officials, donors and some private investors were consulted.⁹¹ The appraisal documents do not provide a specific report of the outcomes of the consultations and no stakeholder analysis was included – although it has to be said that these were not common procedures at the time. However, the documents report enthusiasm for the project among smallholders, both on Bugala Island and in the north-east. Similar expressions of support from farmers were noted by the first supervision mission during VODP's early sensitization meetings. Relevance to the needs of smallholders in the north-east was confirmed by the 1999 baseline survey, which reported shortages of improved seed, low yields and limited extension support for existing oilseed farmers. This is further confirmed by the fact that the traditional vegetable oilseeds are rapidly replacing traditional cash crops (especially cotton) in the project area.

⁸⁹ Main donors in the sector besides IFAD are the World Bank, AfDB, EU, Danida, USAID and SNV.

⁹⁰ EU and GTZ financed the Rehabilitation of the Seeds Industry Project in the 1980s and 1990s and AfDB was supporting the privatization of the seed industry in the early 1990s. World Bank was supporting the rehabilitation of cotton and some oilseed research (VODP Appraisal, Vol. I, p. 12). USAID was supporting the development of a cooperative movement in 1988-1995 (which included the creation of UOSPA) and the development of appropriate technology for cottage processing of oilseeds (which included support to AT-U). VODP Appraisal, Vol. II, working paper 2, p. 14.

⁹¹ The DAO of Kalangala said that there was an excess of consultations, in comparison with the slow progress on the approval and implementation of the project (mission interviews).

123. The appraisal papers provided only a brief outline of smallholder farming systems in the two project areas and no specific social analysis appears to have been undertaken. Therefore, although the project idea might have been welcomed by farmers, there was no analysis of any constraints that might limit their participation (such as food insecurity, shortages of labour, or availability of more attractive options such as fishing on Bugala Island). This lack of social analysis was to prove unfortunate for the oil palm subproject, where many smallholders have been reluctant to participate.

124. **Targeting.** In general, the target group for the project was vaguely defined in terms of poor, rural, smallholder farmers engaged in subsistence farming. Targeting was mainly on grounds of geography, poverty and agroecological suitability. It was known that poverty in Uganda was more concentrated in the north, which had been perpetuated by decades of civil unrest and where agroecological conditions were less favourable. The choice of Bugala Island as the main project area for oil palm production was primarily based on grounds of agroclimatic suitability, although the fact that it was an area of subsistence agriculture and fishing helped to justify the choice. Beyond these broad criteria, no specific targeting strategy was set out.

125. The project does not appear to have developed a more detailed targeting strategy once under way. For the traditional oilseeds subproject, the key mechanism was the selection of the districts and the subcounties within them. Six 'high-potential' districts were chosen on the basis of their suitability for oilseeds cultivation, adequate levels of rainfall and high concentrations of poor farmers. The selection of subcounties was the responsibility of the DLGs, with guidance from the PCO and local leaders, and was based on agroecological suitability, presence of extension staff, etc. The same mechanisms were used for the selection of the expansion districts and their subcounties. Below this level, participation in the project was largely based on self-selection. VODP staff, local politicians and implementing partners (extension officers, AT-U and UOSPA) held 'sensitization meetings' at the district, subcounty and village levels, when project objectives were explained and farmers invited to participate in groups. A definite attempt was made to encourage women to participate in these groups. Among the groups, there appears to have been some targeting of vulnerable farmers for the distribution of free seed although it has not been possible to ascertain how such persons were identified. For essential oils, the project initially worked with farmers who were already growing some of the essential oil crops, such as citronella. Additional participants were recruited after sensitization meetings and joined on a self-selection basis.

126. On Bugala Island, VODP and district extension staff held similar sensitization meetings with smallholders, and women and youths were particularly encouraged to attend. In the first year of operation, some 2,000 farmers registered interest and were grouped into three blocks. Follow-up meetings were held with the block groups. Initially there was an attempt to target the poorer farmers, but as the actual uptake was slow, the project was increasingly forced to accept any willing participant.

127. The oil palm beneficiaries include those who have sold land to the Government for the nucleus estate, outgrowers, smallholders and nucleus estate workers. Some of those who have sold land are smallholders but some are absentee landowners that fall outside IFAD's normal target group. The same observations apply to the outgrowers. The participating smallholders are mainly within the target group but there are some exceptions because any who were interested and willing have been taken on board. It appears that some poorer island farmers such as widows have not been able to participate in the project because they do not have enough spare land or labour to allocate to cash crops. Nucleus estate workers are mainly recruited from poor rural families on the mainland, most of them from the traditional oilseeds area.

Relevance of Design to Objectives

128. **Approach and strategy.** The broad approach to the development of the vegetable oil subsector was appropriate in that the overall success of the production activities, which constituted the core focus of the project, depended on the proper functioning of the entire value chain. The project focused on the weaker links in the chain at the time: for traditional oilseed this required improved seed varieties, increased seed supply, extension support to farmers reluctant to grow sunflower, and value addition. Essential oil crops offered the promise of a high-value crop to farmers where few other cash

crops could be grown, but given its infancy, exploratory research and development was necessary. The inclusion of oil palm in the subsector was appropriate because of its high oil productivity per hectare and the large share of palm oil in vegetable oil imports and consumption. The incorporation of a component on food quality standards was innovative and important, given the risks to consumers of poor-quality cooking oil. Finally, the limited understanding of the subsector as a whole and its low priority among policy makers at the time required a more integrated approach.

129. Project implementation called for a formidable task of coordination given the very different activities and long distances involved. At the technical level, there is very little synergy between the three subprojects. Therefore the question arises as to whether this enterprise would have been better run as separate projects. Undoubtedly there have been some efficiency gains in managing the three subprojects with one PCO. The PCO is a small-staffed unit and task allocation, supervision and reporting have been easy to manage. Administrative and transport overheads have been spread and while separate technical staff have been in charge of the respective subprojects, the overlapping of some tasks has facilitated learning about oil palm among the entire technical staff of VODP. This was important given the lack of specialized skills on oil palm in Uganda. On the other hand, project management and coordination might have been less effective if the oil palm subproject had been fully operational from the beginning. More resources might have been required, thereby reducing efficiency.

130. As a single project, the two main subprojects have balanced each other out, spreading risks and returns, and enabling the different interests of Government and IFAD to be catered for. The oil palm subproject offers higher returns to the economy but has a very small number of beneficiaries, whereas the traditional oilseeds subproject has involved a much larger number of beneficiaries and thus made a greater contribution to poverty reduction. The high risks associated with the establishment of a new oil palm industry are offset by the lower risks of the traditional oilseeds subproject. The higher government attachment to the development of oil palm enabled the traditional oilseeds and essential oils subprojects to be both funded.

131. **Use of best practice.** At the start of the project, there was very little knowledge in Uganda about commercial oil palm growing. Existing knowledge was confined to COREC. This knowledge was used to revive an oil palm research programme, with a new team of researchers. Various alternative development models of plantation development were identified, as practised in Côte d'Ivoire, Indonesia, Malaysia, Papua New Guinea and Thailand. These included the nucleus estate and resettled smallholder system; resettlement block plantings without nucleus estate; and organized smallholders on own land, either centrally organized in project management units or dispersed.⁹² VODP proposed a variation on the first of these models.

132. The oil palm subproject could not have been implemented without the oil palm expertise provided by the private partner, OPUL, which in turn drew on the ample experience in the Far East of Wilmar International Ltd. The senior managers of OPUL and BIDCO both have direct experience of running oil palm plantations in India and Malaysia. It should be added that the external oil palm consultant from Ghana recruited by IFAD has been very valuable in filling knowledge gaps.

133. **Changes in project design.** There were major changes to the design of the oil palm subproject following selection of the private investor in 2000 and signature of the Government-BIDCO agreement in April 2003. First, the other site for oil palm development – in Bundibugyo – was dropped because of security problems on the border with DRC. Second, the size of the nucleus estate on Bugala Island was expanded from 1,000 ha to 6,500 ha, which together with the 3,500 ha intended for smallholders and outgrowers, gave 10,000 ha of oil palm on the island instead of the initially planned 4,500 ha. Third, the intention to assign land for the nucleus estate from degazetted public land was dropped, and land had to be acquired through purchase from private owners. Fourth, the idea of granting 750 ha parcels of public land to resettled smallholders from the mainland was dropped because of the unavailability of public land. This meant that the recruitment of smallholders and outgrowers needed to come from existing island farmers. Other changes included the establishment of

⁹² Appraisal Report, Vol. II, working paper 1, p. 13.

an industrial refinery at Jinja, milling capacity on the island to be doubled,⁹³ credit to smallholders to be administered by KOPGT rather than by a commercial bank, and an acceleration in the pace of development so that targets would be reached within four rather than eight years.

134. BIDCO proposed the expansion in the scale of the nucleus estate on the grounds of economic efficiency. On the advice of Wilmar International Ltd., it claimed that it was simply not profitable to run a nucleus estate on the basis of 1,000 ha and operate palm oil milling of ffb from 4,500 ha. This raises questions about the adequacy of the original project appraisal, which assumed a sub-optimal cultivation area that was unattractive to the private investor.

135. The changes in design did not alter the relevance of the project to its objectives but had major implications in terms of its implementation. These include the requirement for a new EIA, the World Bank's withdrawal as cooperating institution, difficulties in acquiring the additional land for the nucleus estate, and a major increase in project costs, for both the investor and the Government (paras. 151-152).



Nucleus estate with buffer

Source: IFAD Evaluation Mission, 2009

136. **Coherence between objectives, outputs and activities (logframe).** The project has suffered from an extremely weak logframe, which has undermined effective planning and monitoring. The first logframe was done at appraisal in 1997; thereafter it was modified twice, once in 2005 and then in December 2008. Both the initial version and subsequent revisions focused mainly on the oil palm component; only two outputs were specified for traditional oilseeds, and there were almost no activities and no targets. There was nothing at all on essential oils or food standards and little on institutional support. The logframe's many problems include: a confusion of objectives; poor structuring of the different subprojects/components; weak linkage between activities, outputs and objectives; poorly specified indicators; and a lack of targets. Project planning and monitoring have been based on DAO's AWP/B and MOUs with implementing partners, which in turn were based on the appraisal documents rather than on the logframe. The proliferation of objectives in these documents undermined the alignment between objectives, outputs and activities. Surprisingly, the logframe was not reviewed by the MTR or supervision missions until December 2008. appendix 3 reviews the logframes in more detail.

137. **Coherence between objectives and resources.** The financial allocations at initial design were not appropriate for the expanded scale of oil palm production that was necessary for the project to achieve its objectives. As a result, government and the private-sector partner's investment costs were

⁹³ Milling capacity was to increase from 12-18 tons per hour (tph) to 30-60 tph.

substantially increased. However, the IFAD-supported activities were adequately financed and in fact it may be difficult to disburse fully (see para. 1124).

138. **Risk management.** The identification and management of risk in this project has been poor. Risks identified in the appraisal report and the President's Report were trivial compared with the actual risks encountered later, and in most cases would have been mitigated by the project design.⁹⁴ Most of these risks have not materialised although some may yet do so when the harvesting of ffbs commences. However, the major risk identified by IFAD's Operational Strategy Committee in February 1997, of a possible delay in private-sector response, was not addressed.

139. It is unfortunate that the project did not anticipate the risk of public concern about environmental damage resulting from oil palm development or the risk of reduced soil fertility associated with sunflower growing. When the oil palm subproject was redesigned, it is doubly unfortunate that other risks apart from the environmental ones were not examined, especially as the earlier appraisals had specifically recommended a gradual development of the scheme. Given the decision not to degazette public forests for the nucleus estate, the risks of the limited supply and rising price of private land should have been anticipated.

Relevance Rating

140. The project scores highly satisfactorily in terms of alignment. It has high policy relevance, both to the Government and to IFAD, and has high relevance to the needs of the rural poor in both subproject areas. Targeting was largely based on geographic and agroecological considerations, but the project has generally reached poor and disadvantaged groups, including women, in all subproject areas. The design was relevant to the project objectives and the broad subsectoral approach was appropriate, but the three-component design was confusing and important risks were not identified. The project has lacked a coherent structure for relating objectives to outputs and activities, which has somewhat undermined the M&E process. The financial allocations at original design were not appropriate for the increased scale in the oil palm subproject although the increased costs resulting from these have been absorbed by the Government and the private-sector partner. On balance, the project's high relevance in terms of policy alignment, poverty focus and broad implementation approach outweighs the design weaknesses (logframe and financial allocations). It is therefore rated as satisfactory (5).

B. Effectiveness

141. The project will achieve its overall objective of increasing cash income among smallholders from vegetable oil production, primarily because of successes with the traditional oilseeds subproject. The objective of developing an oil palm industry in partnership with the private sector has not yet been achieved (and at this stage, assessment of the subproject should be cautious as the ffb harvesting has yet to take place), but that of optimizing yields and oil extraction technology for sunflower and other arable oil crops has been substantially realised.

142. **Oil Palm Subproject.** The effectiveness of the oil palm subproject has been mixed. It is greatest where it has been under the control of the private-sector partner, i.e. on the nucleus estate and the refinery, but less effective in meeting the targets for smallholder and outgrower plantings. On the other hand, positive results have been obtained with regard to the establishment of KOPGT and the environmental monitoring system.

⁹⁴ The appraisal report mentioned (for oil palm) poor training of extension staff, poor harvesting methods by smallholders, inequitable payment for ffbs, and non-impartial inspection of ffbs received at the mill ramp. For traditional oilseeds, the risks included failure to remedy bird damage to the sunflower crop and to give priority to the district extension system, lack of private-sector interest in producing quality sunflower seed, and farmers' unwillingness to purchase high-quality seed at full cost. The President's Report listed (i) lower-than-expected ffb yields; (ii) environmental risks arising from uncontrolled cultivation of oil palm; (iii) insecurity in the north and west of Uganda; and (iv) delays in improving the only access road to Bundibugyo.

143. At the time of the evaluation mission, the nucleus estate was largely established, with 92 per cent of the target 6,500 ha available for planting and 86 per cent of it planted. The required infrastructure was in place, but, crucially, harvesting of ffbs had not yet begun. The smallholder and outgrower plantings were well below the target of 3,500 ha (see para. 61 above). The recent project extension adds another two years of harvesting before project completion, which, if successful, could accelerate the pace of mobilization. However, the non-realization of the target acreage for smallholders and outgrowers, in addition to the staggered establishment of the nucleus estate, will, in the short run, reduce the volume of ffb deliveries to the mill and thus the projected cash inflows. Small farmer incomes – although expected to be high in comparison with current levels – will be also initially lower than originally anticipated. Several sequences of ffb harvesting will need to take place before wider impacts will be seen on the local economy.

144. **Traditional Oilseeds Subproject.** This subproject has been effective despite intermittent problems of insurgency and bad weather. The number of beneficiaries far exceeds the original target of 60,000 households and the increase in the area planted with sunflower has been spectacular, despite fluctuations during some years (para. 87 above). As well as new farmers becoming involved in sunflower growing, existing farmers are increasing the proportion of their land used for sunflower and are renting additional land for this purpose. As they are using improved seed, their yields are also increasing.⁹⁵

145. The subproject realised significant achievements in all its outputs and it had a catalytic role in encouraging oilseed production, processing and milling by other actors. The number of oil mills in Lira alone increased from three in 1998 to the current 26 (with more to come), and 12 mills are now operating in Apac, Pallisa, Soroti and Sironko where there were none previously. The strategic support to the subsector at various points in the value chain helped to ease major bottlenecks, particularly in improving seed supply and providing extension support to farmers to overcome their hesitancy about sunflower growing. This produced an overall improvement in value-chain efficiency.

146. These achievements could have been even greater with more applied research focusing on soil fertility in particular, more encouragement of private seed suppliers through a speedier withdrawal from the distribution of free seed, a more sustained and deepened extension effort in recent years, and a progression to cottage processing machines that were capable of higher output. Notwithstanding these reservations, the effectiveness of the project is outstanding.

147. **Essential Oils Subproject.** The essential oils subproject was of an exploratory R&D nature but it achieved its aim of verifying the potential for a range of essential oil crops in terms of their oil content, yield, vulnerability to disease, agronomy and commercial prospects. The scope for expanding cultivation of some of these crops has been identified provided certain bottlenecks are addressed. The project has demonstrated that, under the right conditions, some of these high-value crops could offer impressive returns to farmers in poor agroecological conditions.

148. **Effectiveness rating.** Overall, the good performance of the traditional oilseeds subproject has been offset by the delayed effectiveness of the oil palm subproject and the small-scale results of the essential oils subproject. Therefore the effectiveness of the project as a whole is assessed as moderately satisfactory (4).

C. Efficiency

149. **Costs per beneficiary.**⁹⁶ It is not possible to compare the costs with other projects in Uganda or the region because the project is unique in its approach. However, project cost per beneficiary varies greatly between the different subprojects because of the different scales of investment, implementation strategy adopted and speed of beneficiary participation. The high cost per beneficiary for the oil palm subproject (US\$7,923) reflects the high capital and field establishment costs and the 20-year life-span of the investment. High project management costs were warranted by the establishment from scratch

⁹⁵ IAS, pp. 21-22, and mission interviews.

⁹⁶ The figures reported here are based on the reclassified project expenditures (see para. 115).

of an activity that is entirely new to Uganda, including setting up a new implementing agency (KOPGT) and countering negative propaganda. Smallholders' and outgrowers' caution with regard to participating in the oil palm activity has resulted in low beneficiary numbers. In contrast, the traditional oil seeds subproject has realised a very low cost per beneficiary of US\$37. This has been due to the high uptake of the smallholder farmers, the rapid embracing of the subproject by the implementing partners, and the lower-cost implementation strategy adopted. As for the essential oils subproject, the cost per beneficiary (considering all those trained and actively engaged in producing essential oil crops) is US\$575. This higher figure is attributable to the high costs of research, trials, distilling and market development whose impact on attracting beneficiaries is not realisable in the short run when production and marketing are still only being piloted. Overall project efficiency is helped by the fact that the high beneficiary-cost ratios of the oil palm and essential oil subprojects amount to only 33 per cent of total project expenditure compared with the lower-cost traditional oilseeds subproject (44 per cent). Therefore, the average project cost per beneficiary is low (US\$85).

150. **Oil Palm Subproject.** The five-year delay in implementing the oil palm subproject had several implications for efficiency. In the case of the Government, project counterpart funding had to increase by more than 300 per cent, mainly because of the escalation in the cost of land for the nucleus estate, the new ferry and the unanticipated expenditure on mitigating negative criticism of the project. Given the exponential upward trend of land prices in Uganda in the recent past, it is possible that the Government would have realised substantial cost savings if the oil palm subproject had been implemented earlier.

151. As for the private investor, there has been a substantial cost escalation in the oil palm-related investment. The overall average cost of plantation establishment and management has gone up by 42 per cent from the initially projected cost per hectare of US\$4,200 to the current projected cost of US\$6,000 per hectare.⁹⁷ This trend, caused by the recent global increase in commodity prices and continuous currency fluctuations, has negatively impacted on procurement efficiency. The implementation of the delayed subproject also warranted costly procurement sourcing that would have been avoided had implementation been smoothly executed.⁹⁸

152. The delayed implementation of the subproject has meant delayed harvesting of ffbs. This will obviously push back the timing of the oil palm investment's payback period and also delay the realisation of cash flows for OPUL/BIDCO, outgrowers and smallholder oil palm growers. Further, the delay slowed down overall project loan disbursement and required a reallocation of funds between the two subprojects and several project extensions, as well as incurring interest on non-disbursed loan funds.

153. Overall, the oil palm subproject has realised satisfactory efficiency despite its delayed implementation and high cost per beneficiary. The project has not yet yielded outputs to enable a precise calculation of input-output ratios, though from the projected yield per hectare the ratios are expected to be favourable. However, this will depend on the trend in prices of palm oil, currently on the decline, although they are still higher than those projected at the time of project design.

154. **Traditional Oilseeds Subproject.** The subproject has been underpinned by realistic costs that are consistently based on approved AWP/Bs. As a result it has been able to realise lower funding (loan) cost ratios. The subproject cost per metric ton of sunflower is US\$7.5 and the cost to revenue ratio achieved stands at 0.02 per cent. These ratios, which should compare favourably with those of similar projects, have been particularly enhanced by the higher outreach of the subproject.

155. A number of issues have impacted on the efficiency of the subproject, however. Owing to the delay in the oil palm subproject, the core project management, monitoring and supervision costs had to

⁹⁷ Revised projection obtained from interview with the managing director of BIDCO.

⁹⁸ A case in point is the high cost of constructing the estate guest house, which required importation of virtually all the materials in order to quickly establish the field headquarters and so speed up the establishment of the nursery and plantations.

be absorbed by the traditional oil seeds subproject, thereby overstretching its costs.⁹⁹ After the reappraisal of the oil palm subproject, it became necessary to reallocate part of the funding earmarked for Bundibugyo that would not be absorbed by the oil palm activity on Kalangala. There was also a need to harmonize the completion dates for the two subprojects because the cross-cutting activities would be difficult to continue if the traditional oilseeds and essential oils subprojects had to terminate as initially scheduled.

156. The subdivision of the districts had the effect of stripping resources from the mother districts and of overstretching the overall financial, physical and human resources in the PCO for implementation of the subproject. More districts meant more costs for travel from and to the PCO for coordination and monitoring of the many implementing entities. Under the decentralized local government system, each district maintains its own independent service delivery system. Thus, although VODP could have realised cost savings in implementation through a consolidated extension service delivery that would cover both the mother districts and the carved-off district(s), this was politically and administratively unfeasible.¹⁰⁰

157. Management of VODP funds by the DLGs has satisfactorily complied with government and IFAD loan management regulations and covenants in terms of disbursements and accountability. There is a monthly reconciliation of bank accounts by DLGs implementing the project and the PCO. However, at an average of just above 2 per cent of the total districts' budgets, resources for production activities have remained meagre throughout the project period. In fact, the project has provided substantial financial leveraging for the implementing districts. There is little evidence of active collaboration among the implementing partners and other organizations promoting the subproject value-chain activities (NGOs and donor programmes¹⁰¹), which could have provided an opportunity for leveraging additional resources, and for synergy and impact.

158. **Overall management of funds, loan compliance and reporting.** The management and coordination of the project has been efficient, with the PCO taking on the enlarged task of ensuring steady implementation of the oil palm subproject once under way, owing to its high sensitivity to government and the continuous criticism it has encountered.

159. Compliance with the loan agreement and government regulations for public expenditure has been ensured. Financial flows through properly sanctioned withdrawal applications supported by statements of expenditure have been consistent with the loan covenants. There is a good financial control system for funds requisition, release and accountability, which is ensuring the compliance of expenditure with approved work plans and budgets. Separate bank accounts for handling project funds by the PCO and the implementing partners have ensured sound financial management of project funds and compliant financial management systems and controls. Reports from implementing partners comply with sound financial management standards and reporting to the cooperating institution, and IFAD has consistently complied with the loan terms.

160. **Procurement.** Compliance with the loan agreement and government regulations for procurement and disposal of public assets has been ensured and tendering of goods and services has conformed with the loan terms and covenants. However, bureaucratic regulations have to a large extent delayed procurement, as raised in several supervision reports. The mission was informed that some delays are occasioned by the lengthy process of complying with the public procurement legal requirements and infrequent meetings of the procurement unit in MAAIF. Though appropriate in ensuring safeguards and checks and balances in procurement involving public funds, such delays negatively impact on implementation efficiency. For example, the building that was meant to have been completed by end-2007/early-2008 was still not ready at the time of the mission and KOPGT was

⁹⁹ VODP self-evaluation, 2008, pp. 23, 31-33.

¹⁰⁰ For example, Lira district could execute project extension services to Dokolo but this is not possible under the existing DLG decentralized system.

¹⁰¹ For example, USAID and Danida have funded projects on hybrid sunflower production in the Lira subregion.

still incurring rental costs. KOPGT also identified delays in the procurement of vehicles and tyres. The procurement of inappropriate equipment (seed oil content analyser) for NaSARRI also reflects poorly on efficiency.¹⁰² The equipment has continued to sit idle at the institute despite its potential use by other project implementing partners such as UNBS. The delays in disbursement and replenishment of funds to the implementing partners have caused shortages of funds at the field level.¹⁰³ The mission encountered cases where, mid-way through the quarter, some implementing districts not yet received funds for that quarter.¹⁰⁴



Sunflower seeds, Mbale

Source: IFAD Evaluation Mission, 2009

161. Timely preparation and approval of project AWP/Bs has been consistently observed. Project financial statements, special accounts and project accounts have been audited as required. Pre-audit and post-audit of expenditure by DLG implementing partners has been consistently ensured. Pre-audit for procurements and post-audit for operational expenditures has also been done. Also, internal audit of quarterly accountabilities prior to their being submitted to the PCO has contributed to a higher level of compliance to improve financial management practices for project funds.

162. Given the mission's time constraints, limited data availability and the complexity of project implementation, it has not been possible to estimate the actual internal economic rate of return. Overall project management and coordination is 23 per cent of total project costs and, at US\$20, the cost per beneficiary is low. Though comparable data for similar projects of similar magnitude and implementation period were not available, VODP's performance reflects a high level of managerial efficiency. The single management and coordination structure, efficient project coordination and lean project management team greatly contributed to the lower cost per beneficiary. The performance would have been better had the insurgency not slowed down the pace and outreach of the traditional oilseeds subproject and had there not been higher management costs related to countering the negative criticism of the oil palm project, most of which had no direct relevance to the beneficiaries.

163. **Efficiency rating.** Although the project has been managed well, with regular preparation of AWP/Bs and reporting and compliance with loan covenants, problems with slow procurement have limited its efficiency. Overall project efficiency has been affected by delayed implementation of the oil palm subproject and increased pressure on project resources for coordination and monitoring

¹⁰² The equipment was not able to analyse whole seed, as ordered, only crushed seed, so analyses had to be outsourced to Makerere University. The mission was not clear about the handling of this matter, however.

¹⁰³ This was mentioned by KOPGT, the research institutes and some DLGs.

¹⁰⁴ DLGs and other implementing partners are also tardy in submitting accountabilities and quarterly work plans and budgets.

caused by the subdivision of traditional oilseed districts. It has also been affected by the high costs per beneficiary of the oil palm subproject compared with the traditional oilseeds subproject. Overall, project efficiency is rated as moderately unsatisfactory (3).

D. Overall Project Performance

164. Average project performance, based on the three assessments above, is 4.0 (moderately satisfactory). This figure does not do justice to the very major accomplishments of the traditional oilseeds subproject but is largely a reflection of the delay in the oil palm subproject, which has lowered the ratings for effectiveness of the subproject itself and overall efficiency of the project. Although the delay was partly caused by external factors such as difficulties in selecting a private investor and in securing land for the project, some of the delay could have been avoided with speedier decision-making by government on negotiation of the partnership and the setting up of KOPGT. A more thorough analysis of the risks implied by the change in design and better anticipation of potential opposition to a project of this kind would have enabled more rapid project implementation.

Box 2. Key Points – Project Performance

- VODP has high policy relevance to the Government and IFAD and is relevant to the needs of the rural poor. However, it lacks a coherent framework for relating objectives to outputs and activities.
- The traditional oilseeds subproject has been remarkably effective; the effectiveness of the oil palm and essential oils subprojects has been mixed
- Overall project efficiency has been affected by delayed implementation of the oil palm subproject and other procurement hold-ups, and by increased pressure on project resources for coordination and monitoring caused by the subdivision of traditional oilseed districts. Cost per beneficiary of the oil palm subproject is very high compared with the traditional oilseed subproject.
- Project performance is moderately satisfactory because of the delayed effectiveness of the oil palm subproject and moderate inefficiency of the overall project.

VI. RURAL POVERTY IMPACT

165. This section focuses on the two main subprojects, where actual or anticipated poverty impacts are expected to be substantial. Because of significant differences in the scale of impact between the two subprojects and the strong links among the impact domains within each subproject, the analysis is presented for each one separately; then an overall rating is given for the project as a whole. It is too early to expect poverty impacts from the essential oils subproject but some effects can be seen among the citronella farmers, where commercial production has started up in a limited way. As they are such a small group, with similar characteristics to those of the traditional oilseed farmers, the impact on the citronella farmers is included in the assessment of the traditional oilseeds subproject.

A. Oil Palm Subproject

166. The main anticipated impacts on participating farmers are yet to be realised since harvesting of the ffbs was to start only in early 2010. However, there have been many indirect effects of the project thus far. Discussions with participating and non-participating farmers, local fisherfolk and local government officials suggest that these effects have been both positive and negative. However, without quantification it is difficult to assess their extent. Moreover, they are the product of other changes already going on in the island such as the growth of fishing. Positive impacts have included an increase in population (a continued trend from before the project started), improved transport (roads and ferry services), utilities (mobile phone services), increased business, tourism and trade (including purchases of food from farmers and fishermen), better access to financial services, higher land values (though negative in regard to realisation of oil palm area targets), increased investment in housing and access to government services. Negative impacts include increased pressure on government services

(especially education and health), reduced access to forest resources, greater road hazards from the OPUL lorries, and anti-social behaviour in villages and landing sites near the nucleus estate associated with alcohol and prostitution.



Outgrower plot

Source: IFAD Evaluation Mission, 2009

167. Overall, the positive impacts outweigh the negative ones and the situation will most likely improve with the harvesting and marketing of ffbs, whereupon the cash flows will have a bigger multiplier impact. It should be noted that some of the negative impacts are being addressed by OPUL while others in regard to provision of local government services will be most likely reversed once the local government begins to generate oil palm-related fiscal revenues.

168. Any analysis of the rural poverty impact of the oil palm subproject must take account of the fact that it has developed in a context dominated by fishing. Fishing on Lake Victoria and other inland lakes has grown enormously since the late 1990s, and fish and fish-related products have become Uganda's biggest non-traditional export.¹⁰⁵ In Kalangala, it is estimated that 60 per cent of the population is employed in fishing and fish-related activities.¹⁰⁶ Recently, however, over-fishing has become a problem and the fish catch has started to decline. To better control the situation, local governments are trying to reduce and consolidate the number of fish-landing sites, which attract a floating migrant population with a disproportionate number of young men.¹⁰⁷ This is reflected in the 2002 census figures for Bugala Island, which show one of the highest population growth rates in the country (6.5 per cent), a net migration rate of +37.5 per cent, a sex ratio of 143 men to 100 women, and a very small locally-born workforce (36 per cent).

¹⁰⁵ Data from the Uganda Export Promotion Board.

¹⁰⁶ Between 2000 and 2006, the number of fishermen in Kalangala District rose from 5,128 to 9,706; fishing craft increased from 2,486 to 4,797; and the number of gill nets in use went from 58,357 to 241,628. National Report of the Frame Survey 2006 in the Ugandan Part of Lake Victoria, Department of Fisheries Resources, Entebbe, 2006.

¹⁰⁷ The landing site visited by the mission – one of the bigger ones – had a population of 2,000.

169. The high incomes and ready cash provided by fishing have stimulated the local economy and provided an alternative to oil palm growing for young men.¹⁰⁸ This has created shortages of labour on the island, pushing up the price of hired labour for land clearance and weeding by smallholders, and thinly stretching the KOPGT loans.¹⁰⁹ OPUL has had to recruit on the mainland for the nucleus estate (only 10 per cent of those recruited are from the island). Fishing has also had a number of social consequences, including an extraordinarily high incidence of HIV/AIDS, which, at an estimated 30 per cent, is six times the national rate.¹¹⁰ HIV/AIDS is spreading to the nucleus estate labour force and the farming communities, and will inevitably affect project beneficiaries. The high proportion of woman-headed households caring for orphans in the villages also limits women's participation in the project.

Poverty Status of Small Farmers on Bugala Island, 2006

170. The baseline survey of May 2006 (before KOPGT started to mobilize smallholders to grow oil palm) showed extensive poverty among rural households. Most of them were *Kibanja* tenants with less than 3 acres of land producing food for home consumption, supplemented by fishing, timber felling, charcoal burning and petty trade. Only 28 per cent had more than primary-level education and 27 per cent had permanent housing structures. Most of them had limited experience of farmer organization or agricultural extension services (see appendix 5).

Household Income and Assets

171. The main asset for participating smallholders has come from improved land rights (certificates of occupancy) and access to financial services. Some have benefited from cash saved from KOPGT loans provided for land clearance by using family labour. A few farmers with oil palm trials planted in previous years were realising income from local sales of processed oil and soap. In some villages near the nucleus estate, farmers have been able to increase their income from sales of food to the workers. In most cases the extra income has been used for better diet, family expenses and school fees. However, the scale of this impact is small.

172. On the nucleus estate, 1,649 employees have benefited from employment, wages, housing, subsidized food, free health care and social security. Mission discussions with plantation workers revealed that employment on the estate compares very favourably with similar types of work elsewhere (e.g. sugar plantations)¹¹¹ and many are able to remit savings to their families of origin.

Human and Social Capital and Empowerment

173. The main impact on this domain has been the increased empowerment of the farmers, particularly through the organization of the unit and block committees, membership of KOPGT and the recently-formed KOPGA. These organizations provide a range of services such as settlement of land disputes, access to extension services and loans. Farmers have learned how to elect officers, conduct meetings and make reports. The establishment of KOPGT has also given the farmers a stronger voice in their relations with OPUL.

¹⁰⁸ Fisherfolk interviewed by the mission showed little interest in agricultural work; they maintained that fishing provided a higher (at least twice as much) and more immediate cash income than work on the nucleus estate. Being mainly migrants, few of them had even customary or *Kibanja* access to land. Only a few of them cultivated small plots near the landing site for food production.

¹⁰⁹ Between 2006 and 2009, the cost of weeding 1 ha of land rose from UGX 60,000 to UGX 100,000.

¹¹⁰ *The Impact of HIV/AIDS on Fishing Communities*. R. Grellier, N. Tanzam. D. Lamberts and C. Howard. MRAG Ltd and Options Consultancy Services 2004.

¹¹¹ The nucleus estate pays a basic wage of UGX 2,500 (including food) per day and overtime at UGX 500 per extra hour for up to two hours. This is slightly below the going rate of UGX 3,000 on the island for unskilled labour, but above the rate of UGX 2,000 on the sugar plantations and some mainland factories – and it is easier work.

174. Women have been actively encouraged to participate in the project; there is a reasonably high proportion of them among the smallholders (32 per cent) but fewer among the outgrowers (26 per cent). Their participation as beneficiaries has given them access to the unit and block committees and to membership of KOPGT and KOPGA.

175. As far as education and health are concerned, in addition to the use of cash loans for school fees, there has been increased attendance in adult literacy programmes. The nucleus estate workers benefit from the free health services provided by OPUL.

Food Security and Agricultural Productivity

176. The cash advances provided by the project have contributed to food security; however, food security remains a challenge. Some of the farmers visited by the mission said they experienced shortages of food. In a few cases, this has been exacerbated by farmers allocating so much of their land to oil palm that the remainder was not enough to produce sufficient food for their own consumption. Some have even had to rent additional land. This situation is expected to be temporary until the income from ffb harvesting enables them to buy food to compensate for their reduced food production.

Natural Resources and the Environment

177. Bugala Island covers an area of 29,650 ha, of which about 17,000 ha is available for agriculture once the forests, shoreline and urban space have been excluded. Thus, when fully developed, the 10,000 ha of oil palm will represent 59 per cent of crop land and 34 per cent of the total land area. Since it was decided in 2001 that there would be no degazetting of protected areas, the island's 12 central forest reserves, covering an area of 6,700 ha, have been fully protected throughout the project's development. About 60 per cent of the land given to OPUL was grassland and the forested areas were already seriously degraded, with most of the valuable timber already taken out. The table below shows land use prior to plantation development and the anticipated use in 2010:

Table 4. Land Use on Bugala Island, Kalangala, 2004-2010

	Approximate Area Covered (ha)	
	2004	2010
Forest reserves	6,700	6,700
Private forests	10,800	7,200
Wetlands	1,500	1,500
Grasslands and scrub	6,100	1,250
Cropping land	4,500	2,950
Oil palm plantations	0	10,000
Total land area	29,600	29,600

Source: Project M&E data

178. The project has recognized that agriculture, particularly on the scale and intensity intended for Bugala, will have an impact on the environment. As such, priority has been given to environmental concerns, particularly in terms of mitigating potential negative effects. Respect for the environment underpins all activities, which have included EIAs prior to project start-up, incorporating mitigation measures to address the potential negative impacts, and compliance monitoring. All parties have respected their commitments in terms of regularly monitoring, reporting and following up any

emerging problems. The nucleus estate has been developed by OPUL in line with the guidelines for palm oil development produced by the Roundtable on Sustainable Palm Oil.

179. The fact that oil palm plantations are developed on grasslands and secondary private forests has limited the negative impact of lost biodiversity. The introduction of a monoculture raises the risks of disease and pests but the palm plantations have created a habitat for birdlife. The 200-m buffer zone along the shores of the lake has contributed to preserving the existing habitat for wildlife and has been improved through the planting of native tree species.

180. While land clearance can temporarily increase the risk of soil erosion and siltation run-off into the lake, there was limited evidence of this. The techniques used for clearing grasslands minimize soil erosion because only a circular area is cleared, holed and then planted. The techniques used for clearing secondary and bush forest include cutting and stacking on the contour every 4 metres and planting with cover crop, so the potential for erosion is greatly reduced. OPUL has encouraged the use of felled trees for timber. The establishment of weed-suppressing cover crops among the palm trees in the first years is protecting the soil until the palm tree canopy matures. The frequency and timing of fertilizer applications have been carefully adapted to local climatic and soil conditions, while micro nutrients are applied only by qualified personnel. Information provided by the Kawanda Research Institute confirms that no residual effects of agrochemicals have been found in lake water or soils.

181. There have been some complaints by local people about reduced access to forest and water resources and more limited supply of environmental products (timber, fuelwood, grass for thatching, and gravel for construction). The NFA has mentioned encroachment on the central forest reserves by local people. Monitoring of central forest reserves has increased with the project, which has affected the access of local people to these reserves. Monitoring of compliance for the respect of the 200-m lake-protection border has reduced access for the extraction of natural resources by local people. Fisherfolk have commented on the scarcity and increased cost of timber for boat-building, although this is a general problem throughout East Africa.

Institutions and Policies

182. In addition to setting up KOPGT, which is providing important services to farmers, the project has provided increased resources for KDLG, particularly those departments most closely linked to the project, such as the DAO, the district engineer and the land survey department.¹¹² This has enabled them to improve service delivery on the island. However, there is increased pressure on other KDLG resources (e.g. in education and health) arising from the general increase in population, to which the project has contributed.¹¹³ Clearance of private degraded forests has reduced KDLG's income from forest permits.

183. The intensive environmental monitoring programme gives NEMA a unique opportunity to gain experience on the environmental risks and impacts of an oil palm plantation and processing mill. This experience will be valuable for NEMA's assessment of oil palm projects elsewhere in Uganda and also for the handling of environmental issues in relation to other types of agroprocessing plants.

184. The improved infrastructure and increase in commercial activity has enabled the historically loss-making Stanbic Bank branch at Kalangala to become a sustainable profit-making branch, providing improved access to formal financial services by both farmers and the local population. The proposed additional massive infrastructure investment by InfraCo¹¹⁴ will further stimulate economic activity on the island as a whole.

¹¹² The 1998 Land Act requires the establishment of Subcounty Land Committees. Kalangala is so far the only district with such Land Committees in the subcounties where the project is working.

¹¹³ The mission was told there is only one doctor for the district and a scarcity of medicines. There are only two teachers per 100 pupils.

¹¹⁴ InfraCo is a donor-funded infrastructure development company, which, in partnership with MFPED, will invest US\$45 million in the development of new, and rehabilitation of existing, infrastructure (ferries, roads, water and power supply) on the island.

B. Traditional Oilseeds Subproject

185. The traditional oilseeds subproject has had a substantial rural poverty impact on all the impact domains. Farmers have been able to add to their household and farm assets and invest in human capital. Agricultural production and food security have increased, and farmers' capacity to manage their own economic affairs has improved through farmer organizations. Environmental impacts are negligible in the short run. The various implementing partners have been strengthened and are now giving vegetable oil crops higher priority. Other actors in the sunflower value chain have benefited indirectly, thereby improving overall market efficiency and linkage.

186. Citronella farmers have realised similar benefits, with visible improvements in housing, farm investments and empowerment through local groups and links to broader organizations such as the Cooperative Society of Citronella Farmers. There are, however, some concerns about the environmental impact of the distilleries.

Poverty Status of Oilseed Farmers in 1999, 2006 and 2009¹¹⁵

187. The baseline survey shows that, in 1999, the oilseed farmers were very poor: most of them lived in grass thatched houses with mud walls, and only one third had more than primary-level education. The average amount of cultivated land per household was 4.7 acres, of which one third was dedicated to oilseed crops.¹¹⁶ Only 36 per cent of households were solely dedicated to agriculture and the rest had secondary sources of income, such as trading, brick-making, blacksmithing, handicrafts and services. National household survey data for 1999 suggest that respondents in the baseline survey were poorer than the average for districts where VODP was operating (as measured by house construction, for example), see para. 221.

188. Unfortunately, as the IAS did not repeat the socio-economic ranking questions in 2006, it is not possible to compare the poverty status of this sample with the baseline farmers directly (see appendix 2). However, there is much anecdotal evidence of improvements in living standards among the oilseed farmers in the report, which is also mentioned in supervision reports and was confirmed in mission PRA discussions. However, an IAS question on how respondents used the income generated by oilseed sales and processing indicates that 95 per cent of them had realised some positive benefit. The most favoured items were school fees, medical care and daily running expenses (food and upkeep). A smaller number had invested in the farm. House construction – which is so visibly striking when travelling around the area – was only mentioned by about one quarter of the respondents, which may indicate that it is only undertaken gradually after a period of sunflower growing.

189. The mission PRA work found consistent criteria of socio-economic ranking in all the sites visited. These included: landholding, ownership of livestock, material for house construction, number of meals per day, type and level of school attended by the children, and possession of vehicles, motorcycles and bicycles (see appendix 5, tables 2-5). Between three to five socio-economic groups were identified, ranging from 'rich' to 'very poor.' However, most households were positioned in the mid-range, with an average farm garden of 2-6 acres. Sunflower growers were perceived to be better off than non-growers because of the increase in their socio-economic status, but sunflower was grown by farmers across all socio-economic groups. Even the landless – of whom there were only a few – would rent land in order to grow a small sunflower plot.

190. Farmers with more land and productive assets such as ox ploughs were able to dedicate a larger acreage to sunflower and thus generate more income than those with smaller sunflower plots. It appears that the larger farmers were also more likely to offer their land for seed multiplication and demonstration plots, to participate in project activities and to assume leadership positions in the farmer groups. Thus there was an increasing differentiation in socio-economic status among the communities

¹¹⁵ Further details at appendix 5.

¹¹⁶ Although there were some differences in the size of landholdings between the districts – with Lira, Katakwi and Kumi having the most – the amounts of cultivated land and the proportion dedicated to oilseed crops were very similar.

associated with sunflower growing. This process was more marked in some districts such as Mbale and Masindi than in others like Soroti, where families were still in the process of reconstructing their homesteads after returning from the IDP camps. Nevertheless, the main pattern was one of a general accumulation of socio-economic status among all sunflower farmers. The same pattern was observed among the citronella farmers. Box 3 provides some examples of these patterns of wealth accumulation among the sunflower farmers.



Sunflower oil sale, Mbale

Source: IFAD Evaluation Mission, 2009

Box 3. Increase in Socio-economic Position Among Sunflower Farmers

Grace Wasirwa, a widow from Bufuhula Parish, Mbale District, grew half an acre of sunflower in 2002. She processed the oil, which gave her funds to buy five chickens; she eventually sold these and bought a goat. The next year she processed 25 litres of oil, which she sold at UGX 5,000 per litre. With this, plus the sale of the goat at UGX 30,000, she bought a quarter of an acre of land at UGX 85,000 in 2004. She is now building her permanent house.

Jimmy Okalo from Abuli-Atana Parish, Apac District, started with 1 acre of sunflower in 2005 and with the proceeds he bought a goat. The next year he planted 2 acres and bought a sewing machine for his wife. The following two years he planted 3 acres and set up a bee-keeping business. He is also using the money for family maintenance, especially a more varied diet.

James Okidi from the same parish started with 1 acre of sunflower in 2005, and now plants 2.5 acres. He has used the money to make bricks for a permanent house, buy roofing sheets and pay school fees. He has also joined a group of five farmers in purchasing a motorcycle, which they will use as a *boda boda* taxi.

John Onoo from Abadmuno, Lira District, bought a cow and an ox plough with his sunflower proceeds. He has gradually acquired 3 acres of land and a bicycle and has taken a second wife. He has built a brick-wall house with an iron roof and is currently paying UGX 188,000 in fees for two children at secondary school.

Household Income and Assets

191. Improving farmers' cash income is in large measure dependent on increasing the profitability of the crop for farmers. The analysis of production costs, revenue and realised margins shows that smallholder production and processing of oilseeds is generating positive returns and raising household incomes. In the case of citronella, the high establishment costs substantially erode profitability during the first year of production. Beyond this phase, however, the crop is very profitable (see appendix 7).

192. The project has not gathered precise data on household income at any time, although limited indirect data are available. The IAS asked about sources of income before and after 2000, and learned that oilseed sales had increased significantly as the main source of household income and that sunflower had overtaken groundnut as the single most important source. Two thirds of citronella growers said that their income had improved as a result of citronella growing.¹¹⁷

193. The increase in income is implied by the evidence of increasing investment in economic assets. From mission interviews with farmers, it is clear that sunflower production has expanded income from the sale of seed, cake and oil. It has also generated new income streams from complementary enterprises, such as bee-keeping, poultry, pig-breeding, fish-farming and cooked food sales, and facilitated diversification into non-agricultural ventures such as trading, brick-making and transport. Some farmers have invested in land and urban property, for their own use or for rental income.

194. Sunflower growing has directly or indirectly increased employment opportunities in the area. According to the IAS, 86 per cent of farmers hired labour for land preparation, weeding and harvesting. The Ram press has also increased demand for machine operators and artisans making repairs. The higher volume of trading and milling has increased opportunities for traders, transporters and mill workers. Many of these employment opportunities are seasonal – linked to the two sunflower harvests – but they constitute an important extra source of income for youths and the landless. Some youths have engaged in sunflower-related activities in order to raise money and buy goats and cows for marriage.

195. The immediate benefit of increased income and employment is higher expenditure on food, clothing, home furnishings (mattresses, blankets) and consumer durables such as radios, sewing machines, mobile phones and bicycles. Improvements in house construction are made gradually over the years, with mud and wattle walls being replaced by mud and baked bricks and grass roofs by iron-sheeted roofs. The traditional mud granary is replaced by a larger, permanent structure.

196. The increased income streams have enhanced the capacity of farmers' organizations to engage in savings and credit activities (e.g. village banks), which are providing financial services to farmers who have traditionally lacked access to them. These services enable farmers to improve their production capacity and to meet social needs.

Human and Social Capital and Empowerment

197. **Human capital.** By far the greatest poverty-reducing effect of the project has been the beneficiaries' increased ability to pay school fees. This has enabled farmers' children to stay in school longer and to have access to better-quality (private) schooling. The mission met one farmer who, from a piggery that was using his sunflower cake, had financed his children's education up to university degree level. Expenditure on health services, such as hospital charges, was another important item. The nutritional benefit from increased consumption of vegetable oil is another contributor to improved health status (see para. 203).

198. **Social capital and empowerment.** The farmer groups formed and strengthened by VODP have been an important mechanism of empowerment. Their internal organizational capacity has been enhanced by the project's training on group dynamics, leadership, business management and PPM&E. Most of the groups have formal constitutions with clear objectives and procedures for handling finances and electing office bearers. The members feel they are better able to address problems on their own without having to rely on outsiders. They are now linked to a larger number of external organizations and have more confidence in relating to people in authority. Some farmer group leaders have gone on to become locally-elected officials.

199. Sunflower growing has helped to improve women's position by further breaking down the traditional gender division of labour on the farm, increasing women's access to farm assets and new income-generating activities such as sales of oil and cooked food, and promoting their participation in

¹¹⁷ *Impact of Citronella on Food Security*. MAAIF, 2008.

and leadership of farmer groups. The IAS shows that a considerable number of ‘women’s tasks’ are now undertaken as a family activity, and there is much joint participation in decision-making. On average, slightly more farmer group members were women than men and half of the office bearers were women. Some women’s groups work collectively and have built up common assets such as ox ploughs, bee-keeping enterprises, a poultry house and goats, and now have their own marketing store and savings and credit system. They have benefited from the team-work and mutual support provided by the group.

Food Security and Agricultural Productivity

200. **Food security and nutrition.** The PRA work established that farmers are still maintaining a highly diversified farming system, growing a wide range of cash and food crops and rearing small livestock. Food crops are still given priority, especially when the rains are more certain. Sunflower was grown on one third to one quarter of the available land on average, but it varied by season. The proportion of land allocated to cash crops was larger among farmers with more land, and the increased income has allowed them to buy food to an extent that more than compensates for the reduced land available for their own food production. This was also the case for citronella farmers where the requirement for land is small.¹¹⁸

201. According to the PRA discussions, all farmers could afford at least two meals per day (although the poorer ones had less in the dry season) and great emphasis was placed on the possibility of having a more varied diet. In the IAS, 71 per cent of the farmers felt that VODP interventions had contributed to improved food security; the proportion of farmers facing chronic food shortages had dropped since 2000.

202. The project has generated nutritional benefits from increased cooking oil consumption.¹¹⁹ Farmers interviewed by the mission stated that their consumption of cooking oil had increased, and retailers interviewed by IAS said that vegetable oil was one of the fastest-selling commodities in the villages.¹²⁰ Farmers who processed their own oil thought it was of better quality than commercial oil and it made their skin smoother and their bodies healthier.

Box 4. Increased Consumption of Vegetable Oil

‘Now we are using about 1.5 litres of oil per week. We used to go without before.’ (Chairman of Mpumwe Farmers’ Association, Masindi)

‘I grind the Sunfola at the marketing association and bring the oil home for our own use. It is too expensive in the shops so we never bought it before – only when we had the money.’ (Young man, Masindi).

‘Every household is now using cooking oil twice a day compared to times when cooking oil was a dream to many families, who had to depend on simsim paste.’ (Member of Atana Women’s Group, Apac)

‘We use a 1.5-litre bottle per week compared with only a small Fanta bottle (300 ml) before. The children are healthier now because of the improved diet and ingredients.’ (Man, Masindi)

‘Look at me, I am black and beautiful because of my sunflower oil.’ (Chairwoman, Mbale farmer group)

¹¹⁸ Citronella growers allocated only 10 per cent of their land to this crop on average, and much more to food crops or livestock. *Impact of Citronella on Food Security*. MAAIF 2008.

¹¹⁹ VODP has promoted the consumption of cooking oil through the extension staff and the mass media: ‘Vegetable oil is good for your health; sunflower is the best vegetable oil; it is pure and has nutrients like iron that are good for you.’ NB World Vision was also promoting these messages through their nutrition clubs.

¹²⁰ 80 per cent of locally-processed oil is sold to neighbours, local traders, schools and restaurants/IAS, p. 29.

203. **Agricultural productivity.** The project has had a remarkable impact on the output and productivity of oilseeds – particularly sunflower. As mentioned earlier (para. 87), the area planted to sunflower with VODP support rose, the average acreage planted per farmer increased, and harvested output and yields per acre improved. However, as yields were averaging just above 50 per cent of the yield potential achieved by the research institutes in trials on farmers' fields, there is still room for improvement.

204. An econometric yield analysis based on IAS data shows that sunflower yields (kilogram harvested/acre cultivated) were positively affected by the use of fertilizer and longer experience of growing sunflower, and were negatively affected by seed density and intercropping. This suggests that VODP-supported extension has already had an impact, since it has always emphasized these improved cultivation practices. The experience variable may also be picking up increased use of recommended practices.

205. However, despite the fact that almost all the sunflower farmers met were aware of these practices, they did not always apply them. With more consistent application of the improved practices, yields might have been higher. Labour shortages and lack of mechanization have also constrained production and productivity.¹²¹ Transport of produce is often a problem when marketing sunflower seed and bringing citronella to the distilling centres.

Natural Resources and the Environment

206. The cultivation methods used for oilseeds with very little use of fertilizer or pesticides, have limited negative environmental impacts, although this means that soil fertility is being depleted. The risk of soil erosion is no greater in the cultivation of traditional oilseeds than in other cash crops, and in some areas the increased income from oilseeds has meant that charcoal burning has declined as a source of livelihood, thereby reducing deforestation.

207. Citronella and lemon grass-growing have potentially negative environmental effects because of the need for fuelwood for distilling. This is a rather scarce commodity in the growing areas and, while the recent practice of tree planting is to be welcomed, it may not be sufficient to discourage deforestation in the short term.

Institutions and Policies

208. The use of the district extension service for project implementation has increased staff commitment to vegetable oilseed production. These crops have become part of the mainstream extension package and are increasingly figuring in district development plans. The skills and knowledge of the extension staff have increased as a result of project training and practical experience with oilseed cultivation.

209. There has been a substantial economic impact on private milling activities, particularly around Lira. Many milling facilities, some of them large-capacity, have been set up and other trading businesses that have benefited from the products and revenues from sunflower, such as input dealers and traders in animal feed, have substantially increased and expanded.

210. Though not well captured in the district revenue data, the oil seeds value chain is contributing reasonable revenue flows to the district and municipal local governments, where the production of sunflower has gained good ground. In Lira, for example, the local government acknowledges the impact of sunflower production on revenue generation for local governments, including taxes on mills and mill workers, and taxes and licenses on complementary businesses.

211. Government allocations to the NARO research institutes were previously so low that only very limited research could be carried out on vegetable oil crops. VODP's cooperation with NARO has

¹²¹ Some farmers mentioned the need for ox-ploughing services for land preparation and mechanized sowing and threshing of sunflower, indicating that manual labour is not always abundantly available.

contributed to the updating and development of knowledge and skills in the participating research institutes. Their performance in the breeding of new varieties of traditional oil seeds, screening of cultivars, etc., has improved with the extra resources.

212. VODP support enabled the UNBS to develop its technical and human resource capacity to develop food standards for many other subsectors besides vegetable oils, and to gain international status as a food standards certification institution. It also helped it pioneer new methods of working with small producers, such as farmers, which they are considering replicating for other products.

C. Overall Rural Poverty Impact Ratings

213. Ratings for the rural poverty impact of the project as a whole are presented in table 5 below. There were major differences in the impact of the two main subprojects. The traditional oilseeds and citronella areas had seen improvements in the first three domains but these were offset by the lower impact of the oil palm subproject in such domains. However, both subprojects had similar impacts on natural resources and the environment and on institutions and policies. The overall assessment of rural poverty impact across all domains is not calculated arithmetically, but is based on a judgement of all criteria taken together. Bearing in mind the greater impact in the traditional oilseeds subproject and the much greater number of beneficiaries, the overall rating is 5 (satisfactory).

Table 5. Rural Poverty Impact Ratings by Impact Domain and Overall

Rural Impact Domain	Overall
Household income and assets	5
Human and social capital and empowerment	5
Food security and agricultural productivity	4
Natural resources and the environment	4
Institutions and policies	5
Overall rural poverty impact	5

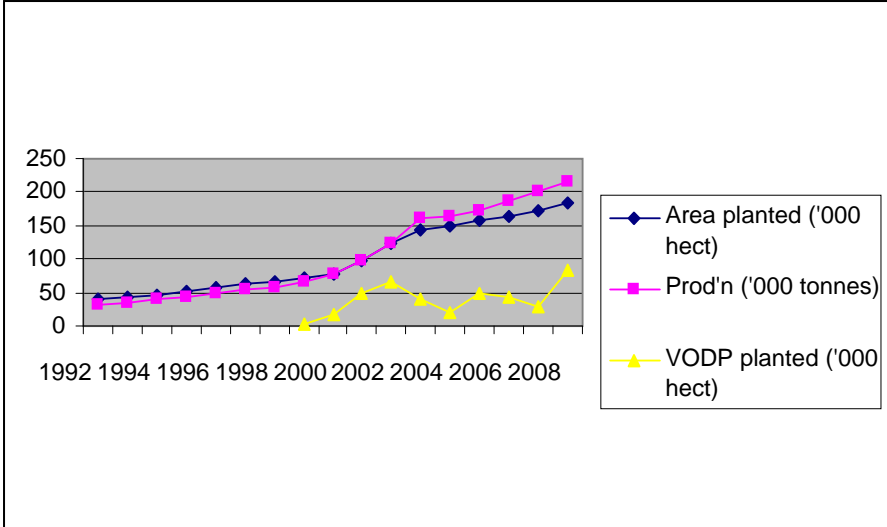
D. Goal-level Impacts

214. This section looks at the project’s contribution to its broader goals, namely, national production of vegetable oil crops (sunflower in particular); domestic vegetable oil consumption; import substitution of vegetable oils; and rural poverty reduction. Since there are many influences on these aggregate processes besides that of the VODP, it is not possible to attribute any changes to the project alone. The point is to examine the broader trends to which the project contributes. The results below and in appendix 6 show that there was a general increase in sunflower production during the project period (to which VODP contributed about 45 per cent in 2008) and that there was a general increase in household consumption of cooking oil, particularly in the VODP districts. There is some evidence of an import substitution effect of the increased production of vegetable oils but this has fluctuated over the years. Finally, there is evidence of improvements in living standards in the VODP districts, but the poverty headcount figure (proportion of households below the poverty line) actually increased because of wider contextual factors such as adverse weather and insecurity. VODP’s contribution to poverty reduction was therefore likely to have been quite locally-specific.

215. **Contribution to vegetable oil crop and sunflower production.** MAAIF has collected data on the area planted with vegetable oil crops since 1980 and with sunflower since 1992. The data show that there has been a general increase in the area planted with all vegetable oil crops since the early 1990s but that the rate of expansion accelerated after 1998. The area planted with sunflower increased particularly rapidly, although it is still only a small proportion of total oilseed acreage (21 per cent in

2008). Figure 4 shows the rapid growth in sunflower production and plantings since 2000; VODP's contribution matches this trend in the early years and again in 2008, but is more erratic in the intervening years because of the insecurity and drought already discussed. However, VODP may have contributed indirectly to the larger trend as the initial expansion prompted an increase in seed sales and milling, which in turn stimulated further expansion in sunflower cultivation beyond the VODP-supported groups.¹²²

Figure 4. Sunflower Production: National and VODP



Source: MAAIF and VODP data

216. **Consumption of vegetable oil.** The Uganda national household surveys provide information on household consumption of cooking oil for 1999/2000, 2002/2003 and 2005/2006.¹²³ Data were extracted for all Uganda, all rural and for the 'VODP districts.' The data show that the consumption of cooking oil increased at all levels, partly owing to population increases. However, the percentage of households consuming cooking oil was also increasing, as was the average oil consumption per household. Moreover, average household oil consumption was higher in the VODP districts and it grew faster than among the average rural population. Unfortunately, no national-level nutrition data exist that would make it possible to measure the nutritional benefits of increased oil consumption.

217. **Import substitution.** It has not been possible to assess the extent of domestic demand, production and import substitution of vegetable oils in Uganda. The mission was told that increased national production of vegetable oil had not kept pace with domestic demand, which has been rising because of the increase in population and reduced poverty.¹²⁴ However, it proved extremely difficult to obtain data that would confirm this. The only evidence available to the mission comes from the IAS, which suggests that there was an import substitution effect between 1999 and 2005, although Uganda was still dependent on imports for over half its consumption of vegetable oil in 2005. However, it was not possible to confirm these trends.

218. Data from MAAIF on vegetable oil imports (by volume) show that, while the composition of vegetable oil imports is very diverse, it is dominated by palm oil imports (as much as 70-80 per cent in some years). In contrast, sunflower oil imports are negligible (less than 1 per cent of imports). The main import substitution effect would therefore come from the oil palm subproject, which is not yet producing palm oil. On the contrary, imports of crude palm oil may have increased with the

¹²² These broader effects were reiterated on numerous occasions during mission meetings, but it has not been possible to quantify them.

¹²³ The household surveys capture consumption of cooking oil during the seven days prior to the interview. Household-specific units of measurement are converted into litres.

¹²⁴ Mission interview with managing director of BIDCO.

establishment of the BIDCO refinery at Jinja. However, there are considerable fluctuations in the levels of imports and a separate analysis would be required to establish what has been going on.

219. **Poverty reduction.** Poverty data were extracted from the national household surveys of 1999/2000, 2002/2003 and 2005/2006 for the national population, the total rural population and the VODP districts.¹²⁵ The headcount data show that poverty was higher in the VODP districts than in all rural areas, which confirms the appropriateness of the project's initial targeting of districts. At the national level, poverty rose slightly in 2002/2003 but fell substantially in 2005/2006.¹²⁶ This was reflected in the rural figures as well. The VODP districts exhibited a similar trend, although poverty rose more during 2002/2003 and declined less in the subsequent period so the poverty headcount was higher in 2005/2006 than in 1999/2000. Thus it would appear that the significant improvements in livelihoods realised in the sunflower-growing areas were not reflected in the broader regional situation. Of course, it could be argued that poverty might have been even higher without the project.

220. In order to investigate non-monetary aspects of poverty, data were also extracted from a selection of indicators that had proved to be strongly associated with poverty. The data show significant improvements in these indicators during the three survey rounds.¹²⁷ For instance, in the VODP districts, the proportion of households borrowing or going without salt reduced from 63 per cent in 1999/2000 to 37 per cent in 2005/2006. The proportion with permanent (baked-brick) walls rose from 53 per cent to 58 per cent in the same period, and the proportion with permanent roofs went from 26 per cent to 33 per cent. However, despite these improvements, the VODP districts remained poorer than the rural average.

221. In summary, poverty in the VODP districts was more marked compared with that of the rural population in general, and it actually increased between 1999/2000 and 2005/2006. On the other hand, performance in terms of non-monetary poverty indicators showed improvements over the period. The latter data are consistent with the changes manifested by VODP beneficiaries. The project's direct contribution to poverty reduction in rural areas would probably be more marked in the sunflower-growing communities. It would also have made an indirect contribution to urban employment expansion associated with the new milling and trading opportunities in the towns, but this effect was not measured.

Box 5. Key Points – Rural Poverty Impact

- The main impacts of the oil palm subproject on participating farmers are yet to be realised but there have been many indirect effects of the project. Overall, the positive impacts outweigh the negative ones and the situation will most likely improve once the harvesting and marketing of ffbs commences
- The traditional oilseeds subproject has had a substantial rural poverty reduction impact on all the impact domains
- With regard to the project's contribution to its broader goals, the results show that there was a general increase in sunflower production during the project period and a general increase in household consumption of cooking oil, particularly in VODP districts. VODP's contribution to poverty reduction was likely to have been quite locally-specific.

¹²⁵ Data were also disaggregated for pilot and expansion districts and for the separate districts, but the results were not reliable because of the small numbers involved.

¹²⁶ The rise in poverty between 1999/2000 and 2002/2003 is thought to be mainly due to a change in census methodology (see para. 19 above).

¹²⁷ The difference in these trends is due to the fact that such non-monetary aspects are not reflected in the basket of goods used for the household consumption data.

VII. INNOVATION AND SUSTAINABILITY

A. Innovation, Replication and Scaling up

222. **Oil Palm Subproject.** This is the first major PPP in Uganda and is also the first for IFAD. It has pioneered new forms of cooperation between the private sector, local and national government and farmer organizations. This cooperation has extended beyond the sphere of direct production to the broader provision of local services and environmental management. The PPP brought a major new investor to the country, with relevant new knowledge, from Malaysia. Although the plantation mode of production with a nucleus estate/outgrower/smallholder combination is widely practiced in other countries, it is new to Uganda.

223. The structure and functions of KOPGT are very innovative, particularly the mechanisms for protecting farmers' interests vis-à-vis the nucleus estate. There are three critical innovative elements:

- The pricing formula for ffb harvests is linked to the world price in Malaysia, which includes the cost of transporting crude oil to the mill in Jinja. This means that farmers are not price-takers; and OPUL is not a price-setter. Most other arrangements with smallholder producers have broken down because of the very low prices paid;¹²⁸
- With the purchase of the 10 per cent shareholding of OPUL, smallholders are represented on OPUL's Board, so they are part of the discussions about the company; and
- OPUL provides seedlings and fertilizer at cost to smallholders so they benefit from the economies of scale and logistic organization implicit in modern production. For farmers, oil palm seedlings would not otherwise be available and the purchase price of fertilizer would be much higher.

224. The above innovations support equity for smallholders in their relationship with the private sector. Besides, the loan scheme is also new to many smallholders, although it has been applied in other Ugandan plantation outgrower systems.

225. **Traditional Oilseeds Subproject.** The type and method of project intervention drew on tried and tested approaches to increasing agricultural production and productivity by improving (a) the quality and quantity of inputs (in this case, seed varieties); (b) the agronomic practices of smallholder farmers through training and extension advice; and (c) returns to farmers through value addition. However, a particular innovation was the incorporation of a component on the development of food standards – something only recently adopted in similar projects. What was also novel – at least to Uganda – was situating these activities within a more integrated subsectoral approach aimed at improving linkages in the sunflower value chain.

226. The subproject's main strength was less in innovation than in replicating and scaling up the approach to a large geographical area. As mentioned earlier, it was able to expand from working in the six pilot districts to eight neighbouring districts in 2002. Its ability to do so rested primarily on the strategy of working through local government structures that had the mandate, if not the resources, to cover a large number of districts. Further scaling up is now in the hands of the private sector. Policy dialogue arising from this process of scaling up is being taken forward by OSSUP.

227. **Essential Oils Subproject.** The development of niche markets for high-value crops for poor farmers is very innovative. It requires very specialized knowledge and contacts with international markets, which are only now being developed as a result of the project. There is currently little cultivation of essential oil crops in Uganda and most essential oils used by industry are imported.

¹²⁸ For example, British American Tobacco in Kenya; Lonhro in Zambia with cotton, etc.

228. **Rating for innovation.** Bearing in mind the high degree of innovation in the oil palm PPP, the incorporation of innovative elements regarding food standards and essential oils, and the substantial replication and scaling up of the traditional oilseeds subproject, the overall rating for innovation, replication and scaling up is 5 (satisfactory).

B. Sustainability

229. **Oil Palm Subproject.** The overall sustainability of this subproject is highly dependent on that of the private investor, on whom the harvesting, processing and eventual sale of the palm oil depends. The commitment of the investor and its own sustainability are not in doubt. It is underpinned by the heavy financial investment so far incurred, supported by well-functioning forward market linkages already established on the basis of the sale of refined (imported) crude palm oil. The market for cooking oil in Uganda and in the region, for which BIDCO already commands a reasonable share, is both robust and growing.

230. The sustainability of outgrower and smallholder participation in the project will hinge largely on the level of benefits realised through the ffb harvests. Both groups have had to wait a long time for this, and expectations are high. There is every prospect that, providing the logistics for collection of ffbs are sorted out, the price formula is correctly applied and the pricing committee performs its monitoring function properly, the harvests will be successful. The level of cash income to resource-poor farmers is likely to meet if not surpass their expectations and may attract higher levels of participation in future.

231. The sustainability of the outgrower operation will also, however, depend on the degree of trust and cooperation that exists between OPUL and the farmers. This will require improved communication with the outgrowers about the inputs and services being supplied to their fields, symbolic markers of their field boundaries, and the availability of a mechanism for greater involvement in field management for those who wish it.

232. The sustainability of the smallholders' operations also hinges on the accumulation of agronomic skills regarding their oil palm plots, which in turn depends on improving the quality of extension advice provided by KOPGT. The current system is functioning well and there are no alternative suppliers of extension advice.¹²⁹ However, the KOPGT field staff will require further training by OPUL to extend and deepen their knowledge of oil palm agronomy. OPUL would be probably prepared to provide this because they have an interest in achieving the maximum yield of oil from the ffbs harvested, but financing would need to be found from some quarter. The smallholder operations are also highly dependent on the KOPGT loans, whose sustainability depends on the effectiveness of the proposed mechanism for credit recovery and the use made of the reflows. This loan recovery mechanism should certainly work as long as there is good cooperation and coordination among KOPGT, OPUL and the smallholder loan beneficiaries.

233. The sustainability of KOPGT will depend on its finances, management, staffing and relations with its principal stakeholders (OPUL, KOPGA, KDLG and the Government). There are no major questions about the last three because, on the whole, KOPGT is staffed and managed well and has excellent relations with its stakeholders. The major question, then, is its financial sustainability. The Trust finances consist primarily of IFAD loan funds transferred by the Government through the PCO, and beneficiaries' membership and annual subscription fees. The annual income from KOPGT membership fees would be barely 6 per cent of its current running costs, assuming a full complement of 3,500 ha chargeable at UGX 5,000 (US\$3) per acre per year. However, KOPGT's staffing and running costs will decline once the full complement of outgrower and smallholder oil palm plantations is reached, the need for extension advice and loans to cover plantation establishment declines and the loan recovery mechanism is well established. Although KOPGT's financial position is not currently sustainable without continued funding from IFAD, various options have been proposed that suggest a

¹²⁹ NAADS does not have the expertise to deliver oil palm extension, KDLG does not have the resources and OPUL does not have the desire. In mission interviews, OPUL expressed a clear preference for the current system – which is similar to that prevailing in Malaysia – to continue.

more sustainable future at a lower level of operation.¹³⁰ The mission felt that these and other possible options to address the financial sustainability of KOPGT (such as charging for extension or other services, levying cess on the marketed ffbs or retaining a portion of the reflows¹³¹) should be explored as soon as possible.

234. Ultimately KOPGT's sustainability will depend on its conversion into a fully self-financing private company or a wholly farmer-owned organization. In the latter respect, the establishment of KOPGA presents options for the future. Although it has not yet marshalled any financial strength of its own, it might at some stage be able to pay for KOPGT services. Alternatively, it could assume some of KOPGT's representational functions, co-opt the KOPGT secretariat for extension services and render a separate trust unnecessary.

235. The environmental sustainability of the oil palm plantations is assured by the strict monitoring system that has been put in place and by the fact that the current production practices are appropriate for the environment.

236. **Traditional Oilseeds Subproject.** The sustainability of the subproject's main output – sunflower production – hinges on the efficiency of the value chain, which will ensure a continuing demand for the product at reasonable levels of profitability for all stakeholders. Although these efficiencies have improved during the project period, not least because of the increased output from farmers, a number of weaknesses remain (see detailed analysis at appendix 7). Nevertheless, sunflower production is likely to be sustainable into the medium term.

237. Five key elements call for attention: adequate seed supply; farmer productivity levels; value addition in terms of milling; quality of the post-harvest marketed produce; and the existence and stability of the market. Seed supply is currently not sustainable. Seed multiplication of both 'Sunfola' and hybrids are not well defined and imports of hybrid seed are not very reliable. Private seed companies need to be more actively involved in the value chain in order to enhance sustainability of sunflower seed supplies. Realisation of higher profits at the farm level is still largely constrained by high unit costs of production, arising from manual technologies, low productivity and poor produce quality. Growers who are adding value to their produce by pressing oil are realising higher profits, but there are constraints on the capacity of the manual presses promoted by the project.

238. Both farmers and millers are aware of the need for higher post-harvest quality sunflower grain to improve their profitability. The major problems here are poor storage, limited access to post-harvest handling equipment and materials, and the behaviour of middlemen who mix good and bad grains together. It is evident that the millers are realising sustainable profits but there is a clear demand for more formal finance in the private sector to cover short-term working capital requirements, as they have had limited success in obtaining credit from financial institutions. The market for sunflower exists, is stable and is growing. However, there is still room for improving market efficiency and returns to the farmers. To date, there is limited collective bulking and marketing of the sunflower crop by farmers, which would increase their bargaining power, enhance the quality of the produce marketed, and realise better prices for it.¹³²

239. The sustainability of the project implementing partners is more in doubt. Although DAOs were the most appropriate institutions to provide extension support to the farmers, chronic budget underfunding, inadequate local revenue generation and ever-dwindling staff levels are unlikely to permit continued project support without external funding. The situation is further complicated by the ongoing uncertainty about the extension roles of the DAOs and NAADS. Likewise, government funding of the NARO research institutes is highly inadequate, despite the establishment of revolving

¹³⁰ Supervision mission June 2008: Institutions Development and Microfinance Technical Report.

¹³¹ The levying of cess has worked effectively in the coffee and cotton sectors for ensuring the financial sustainability of their regulatory bodies, the UCDA and CDO. There have been no reflows from the loans yet.

¹³² In a few cases where farmers' marketing associations exist and function well, the farmers are already obtaining better prices.

funds with the proceeds from sales of breeder seed to seed companies. These funds could support some limited research activities related to development of new varieties, but would be unlikely to cover the research requirements fully. Similarly, UNBS’s work on food standards will not be sustainable until certification is more widespread and the associated revenues are forthcoming. In the meantime, government funding is inadequate. Traditionally, UOSPA has depended on grants from donors and has not built up its capacity for financial sustainability. As such, it can not on its own sustain the activities it has been implementing in the VODP traditional oil seeds subproject. AT-U is no longer active in the area because donor funding ended.

240. In the longer term, the physical sustainability of sunflower may be threatened by reduced soil fertility. The improved cultivation practices promoted by the project may have postponed this effect in the short term, but the lack of attention to soil fertility and appropriate use of fertilizer may ultimately threaten the sustainability of this crop. Another risk to sustainability is deterioration of the foundation seed, for example, owing to reduced disease tolerance. The NARO research institutes need to continue to ensure that optimum quality seed is available.

241. **Essential Oils Subproject.** The sustainability of benefits from the work on essential oil crops depends on completing the task of identifying and improving linkages in the relevant value chains so that the knowledge generated by the research can be converted into commercial opportunities with benefits for farmers. Crops suitable for development have been found, and the farmers are keen to pursue these opportunities. However, the subproject currently depends on a single implementing research partner, whose funding is totally reliant on external funding and therefore precarious. There are no signs that the Government/NARO will replace IFAD funding at the end of the project. As far as the main crop – citronella – is concerned, the distilling process does not appear to be environmentally sustainable and although a potential market has been identified, no regular orders have been secured as yet. This situation is not unusual for the R&D phase of crop development and could well be rectified with appropriate development interventions, but it is not sustainable at present.

242. **Rating for sustainability.** In general, the actual or potential benefits from traditional oilseeds and oil palm are sustainable. Farmers are committed to growing the crops, they have the expertise to do so thanks to extension support from the project, and the market is assured by private-sector investments in marketing and processing. However, there are doubts about the financial sustainability of KOPGT on which the sustainability of smallholder oil palm production will still depend in the short run. There are also doubts about the sustainability of the various partners in the traditional oilseeds subproject, and the R&D of essential oil crops is not currently sustainable without external funding. Therefore the overall rating for sustainability is 4 (moderately satisfactory).

Box 6. Key Points – Innovation, Replication and Sustainability

- The oil palm subproject is the first major PPP for Uganda and for IFAD. The structure and functions of KOPGT are innovative, as is the development of niche markets of high-value essential oil crops for poor farmers.
- The main strength of the traditional oilseeds subproject was in replicating and scaling up the approach to a large geographical area by working through local government structures.
- The actual or potential benefits from oil palm and traditional oilseeds are sustainable. However, the financial sustainability of KOPGT is precarious and there are doubts about the sustainability of the implementing partners in the traditional oilseeds and essential oils subprojects.

VIII. PARTNER PERFORMANCE

243. **IFAD.** The Fund was closely involved in the design of VODP. Substantial resources were invested in the appraisal process, with numerous design and development teams, a wide range of specialists and a very consultative process. However, while the design of the oil palm subproject was technically sound, it proved to be of dubious commercial viability and there was insufficient analysis of the socio-economic context, which resulted in slow uptake by farmers. On the other hand, IFAD enhanced the pro-poor focus of the oil palm subproject by ensuring a fair price-setting mechanism for ffbs, thereby supporting the smallholding element, and by ensuring the setting up of KOPGT and its participation on OPUL's board. The land rights requirement for smallholder registration was simplified to ensure that as many farmers as possible could participate. IFAD also recommended the setting up of the IMS to ensure that environmental issues were addressed.

244. **IFAD** gave important behind-the-scenes support to the Government during the difficult process of securing a private investor and subsequent negotiations over the redesign of the oil palm subproject. Its continued support after the World Bank's withdrawal as cooperating institution was much appreciated by all players. The Fund also helped in mitigating negative publicity by providing information/clarifications to donors and sponsoring publicity in the international media. In the more recent past, when there have been difficulties with BIDCO over the Government's delay in securing land for the nucleus estate, IFAD played an important mediating role between the two parties.

245. Unlike other international financial institutions, IFAD had no environmental and social safeguards in place in the early years of the project¹³³ but exercised its responsibilities in this respect in a pragmatic fashion. It is a moot point whether the existence of such safeguards would have helped or hindered the redesign of the oil palm subproject. On the one hand, a more thorough analysis of socio-economic aspects might have led to greater awareness of potential difficulties in securing land and smallholder/outgrower uptake. On the other hand, however, the reduced flexibility usually accompanying safeguard policies might have made it difficult to continue with the project under the conditions requested by BIDCO.

246. IFAD ensured that the supervision process was effective and that the transition from the World Bank to UNOPS as cooperating institution was executed smoothly. Staff of the Fund have participated in recent supervision missions, visited the project regularly and senior personnel have made additional visits to ease bottlenecks when necessary. Extra consultancies were funded to provide input on specific issues (e.g. credit, sunflower value chain, smallholder organization in Kalangala, etc.). IFAD also strengthened project implementation by providing training to VODP staff on gender strengthening, M&E, rural finance and PPM&E. It also maintained a satisfactory mechanism of loan disbursement that facilitated smooth project implementation. The IFAD Country Officer has provided valuable support to VODP, especially in discussions with donors. The Fund's strong support to VODP was recognized by a wide variety of stakeholders met by the mission, including high-level government officials, the managing director of BIDCO and the PCO. Its performance is therefore rated as satisfactory (5).

247. **Government of Uganda.** There is a strong sense of ownership of, and commitment to, the project at all levels of government, especially for the oil palm subproject. In spite of opposition from vested interests and adverse publicity, senior officials in a number of ministries have played a major role in pushing VODP forward thanks to their participation in the Land Acquisition Taskforce, VODC and IMS. The mission was impressed by their degree of involvement in the project and familiarity with its progress. Government commitment to the project is also demonstrated by the fourfold increase in its financial support, from US\$3.8 million to US\$12 million.

248. That said, government procedures have caused delays in project implementation, thereby reducing its efficiency. There were delays in the clearance of MOUs with implementing partners,

¹³³ *Environmental and Social Assessment Procedures* was approved by IFAD's Executive Board only in April 2009.

which held up the release of funds to them. The selection of the private investor was delayed by five years, the operationalization of KOPGT was delayed by a further two, and land acquisition in Kalangala was slow. The consequences of these delays on the performance of the smallholder element and the further implications for harvesting and milling efficiency were not foreseen. Other problems with the Government's procurement processes are exemplified by delays in the completion of the KOPGT building, provision of road equipment for KDLG, delayed purchases of equipment for some of the research institutes and UNBS, and by the slow release of funds to the districts and implementing partners. Finally, from time to time, there have been staffing problems, including delayed confirmation and renewal of staff contracts; salary levels not commensurate with the level of responsibility involved and the out-of-hours work; and delayed response when such issues were raised by supervision missions.

249. In other areas, such as establishment of the PCO, compliance with loan covenants, audit and project monitoring, government performance has been satisfactory. The performance of the PCO has been highly commendable, given the scale of the task required, its small staff and the external criticism it faced in the early years. The strong high-level support to the PCO has been an important factor in its good performance.

250. The DLGs have continued to provide strong support to the project through their elected leaders and technical officers, despite the restructuring of the extension system and dwindling resources. The performance of other implementing partners has also been satisfactory, albeit somewhat undermined by their overall precarious resource situation.

251. Overall, despite the Government's very strong commitment to the project, its performance was undermined by its procurement procedures. Its performance is therefore rated as moderately satisfactory (4).

252. **Cooperating institutions.** The World Bank acted as cooperating institution for VODP until August 2004, having been closely involved in project formulation and appraisal. The same team leader subsequently led the supervision missions, and the reports give the impression of a high degree of commitment to, and knowledge of, the project. The Bank was able to use its influence to push forward negotiations on selection of the private investor and played an important mediating role. Following the Government's agreement with BIDCO on changes in the oil palm subproject, the Bank was instrumental in pushing for a revised EIA and reappraisal of the project. It led the technical review mission and simultaneously conducted an MTR.¹³⁴ Thus the project was heavily influenced by the Bank during those early years. It is to be noted that IFAD did not participate in the Bank's supervision missions or the MTR, and only fielded a consultant to the technical review mission.

253. UNOPS took over from the World Bank as cooperating institution in September 2004. The supervision missions were now conducted twice yearly rather than once, and there was more IFAD involvement.¹³⁵ The UNOPS supervision missions provided a more detailed and comprehensive monitoring of project progress, and included technical experts on issues such as agronomy, rural finance, oil palm and farmer organization, whose recommendations were followed up by each successive mission. The UNOPS missions identified problematic issues at an early stage (e.g. the weakness of the research institutes, lack of attention to soil fertility and seed supply, the need to consider savings and credit activities, and group marketing). Greater attention was also paid to gender, participatory approaches and HIV/AIDS. Practical recommendations on project management, financial administration and monitoring contributed to improving implementation.

254. It is still too early to assess the performance of the one mission directly supervised by IFAD. As cooperating institutions, the World Bank and UNOPS made different contributions to the supervision process but both added value at that particular stage in project development. However, both institutions focused primarily on the oil palm subproject, paying less attention to the traditional

¹³⁴ One effect of these overlapping functions was a long delay in the submission of the reports: the MTR by one year and the technical review mission by two years.

¹³⁵ IFAD usually fielded a member of the country team and a consultant.

oilseeds subproject and very little to the essential oils subproject. Overall, the performance of the cooperating institutions is considered to be satisfactory (5).

255. **Private-sector partner (BIDCO, OPUL).** The private-sector partner has demonstrated strong commitment to realisation of the oil palm subproject and an extraordinary degree of patience with the Government over its negotiation of the agreement and slow pace of land acquisition.¹³⁶ Its commitment is reflected in the size of the investment to date and the speed of its implementation. The fact that BIDCO/OPUL moved faster than the Government in meeting its obligations in the agreement was acknowledged by MFPED during discussions with the mission. At the time of the evaluation BIDCO's investment amounted to about US\$75 million, which is already more than double the private-sector investment originally foreseen. With a contribution of UGX 28.5 billion in 2008 (approximately US\$14 million), over the space of three years BIDCO has become Uganda's fifteenth largest taxpayer.

256. On Bugala Island, OPUL has shown flexibility in adjusting to local conditions. For example, it agreed to reduce the minimum size of the consolidated outgrower plots, despite a considerable reduction in operational efficiency. It absorbed the cost of unsold seedlings arising from the initially small numbers of smallholders, and has taken measures to respond to problems raised locally such as errors in land clearance by the OPUL workers. It has provided informal technical backstopping to KOPGT and fully complied with NEMA environmental risk-mitigation conditions. OPUL has developed excellent relations with KOPGT and KDLG. The performance of the private-sector partner has been exemplary, and is therefore ranked as highly satisfactory (6).

Box 7. Key Points – Performance of Partners

- IFAD was closely involved in the design of VODP and provided important behind-the-scenes support to the Government during the difficult times of the project. It was also increasingly involved in the supervision process, and the project has benefited from in-country support from the IFAD Country Officer.
- There is strong sense of ownership of, and commitment to, the project at all levels of government, especially for the oil palm subproject. The performance of the PCO has been highly commendable. However, government procedures have caused delays in project implementation and procurement.
- Both the World Bank and UNOPS made important contributions to project supervision, although they focused primarily on the oil palm subproject and paid little attention to the essential oils subproject
- The private-sector partner has demonstrated its strong commitment to realisation of the oil palm subproject, and its performance has been exemplary.

¹³⁶ BIDCO has not yet received the 20,000 ha of land for the estate on the mainland but it has not exercised its right to terminate the agreement with the Government if the land was not delivered within 12 months of the agreement.

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Overall Project Achievements

257. The three subprojects differed enormously in their performance and achievements. While all subprojects scored well in terms of relevance, the lower effectiveness, efficiency and impact of the oil palm and essential oils subprojects offsets the satisfactory effectiveness, efficiency, sustainability and rural poverty impact of the traditional oilseeds subproject.¹³⁷ Therefore, the overall assessment of the project is moderately satisfactory (4). The summary ratings table is provided below.

Table 6. Summary of Project Performance and Impact

Evaluation Criteria	Project Evaluation Ratings
Project performance	
Relevance	5
Effectiveness	4
Efficiency	3
<i>Project performance</i>	4
Rural poverty impact	
Household income and assets	5
Human and social capital, and empowerment	5
Food security and agricultural productivity	4
Natural resources and the environment	4
Institutions and policies	5
Overall rural poverty impact	5
Other performance criteria	
Sustainability	4
Innovation, replication and scaling up	5
Overall project achievement	4
Partner performance	
IFAD	5
Government	4
Cooperating institutions	5
Private-sector partner	6

B. Conclusions

258. Because of the novelty of the PPP, extent of leveraged private-sector financing and political controversies involved, VODP is a high-profile project. It is highly innovative, providing important lessons from all three subprojects with regard to the advantages and challenges of a PPP, the potential for replication and scaling up of traditional smallholder development through a value-chain approach, and the challenges of developing niche markets for little-known crops.

¹³⁷ Note that the performance of partners is not included in the assessment of overall project achievement.

259. The project has had a catalytic effect in promoting sunflower cultivation and processing, evidenced not only by the large number of beneficiaries involved but also by the expansion in industrial milling and sales of vegetable oil. In terms of replication and scaling up, the traditional oilseeds subproject has been successful. The potential achievements in the oil palm subproject will need to be assessed cautiously as they are still to be realised. While the model is innovative and supports an equitable relationship between the smallholder and private sectors, and the benefits to smallholder farmers are expected to be substantial, only a small number of them are currently participating (651 farmers). Knowledge about the requirements for developing niche markets in essential oils has grown considerably, but the impact on farmers is still rather limited (995 farmers). Despite the many challenges faced and the underestimation and poor management of project risks (related to land and the environment), the level of commitment to the project by sponsors, investors, managers and implementers is outstanding. There has been strong cooperation and partnership in all subprojects and at all levels.

260. **Oil Palm Subproject.** Important lessons are to be learned from the oil palm subproject regarding the design and establishment of a PPP:

- (a) Like any partnership, joint commitment to project objectives and mutual understanding of each others' needs and constraints is required. Public organizations often do not appreciate private companies' need for speedy decisions, while the latter may not understand the complex consultation and approval processes within public bureaucracies. Communications and dialogue are necessary to build up trust between the partners, which implies transactions costs and time delays;
- (b) Where large-scale commercial production is planned, it is important to ensure adequate involvement of the private sector at appraisal to ensure that the proposed project is commercially viable. The project must be appealing to the private investor in terms of its potential to generate sustainable returns over the longer term;
- (c) Selection of a private-sector partner should be underpinned by an analysis of required private investment conditions, including availability of necessary resources and the impact of any fiscal incentives sought. Any incentives provided should not disrupt the subsector in which the PPP investment is to be undertaken, so as to avoid resistance from competitors;
- (d) Delays in executing PPPs have definite cost implications that may derail the implementation of the PPP investment;
- (e) Any PPP involving a national government, United Nations organization and large private investor involves high political risk and may attract opposition from industry competitors, NGOs and the like. These risks should be factored into the design of the project. Strong commitment from all partners and good public relations are necessary from the outset; and
- (f) When problems arise, IFAD can play an important mediating role between the PPP partners, although it requires a country presence, and can also be effective in bringing a pro-poor focus to the partnership by funding particular elements or providing technical inputs.

261. Regarding the specific plantation aspects of the project, the key lessons are that (i) any large-scale conversion of land use needs to be thoroughly investigated at appraisal and public relations activities put in place to allay public concern; (ii) where a new crop and mode of production are involved, appropriate incentives are needed to encourage risk-averse farmers to participate in the new project; (iii) the explicit introduction of environmental risk-mitigation measures and regular environmental monitoring of plantation development has proved to be effective and should be continued; and (iv) where new institutions like KOPGT are to be set up, substantial training and ongoing backstopping will be necessary during the initial stages.

262. The decision to expand the nucleus estate sixfold had serious implications for its implementation because it affected the pace and cost of implementation and led to public concerns about possible

effects on the environment. These concerns provided fodder for vested interests opposed to the project, which in turn undermined potential support among landowners and farmers on the island. With the benefit of hindsight, the project should have explored the implications of the nucleus estate expansion earlier and in greater depth, anticipated potential land shortages and concerns by environmentalists, and proactively addressed these problems. Any future development of oil palm on the mainland should factor in these concerns from the outset and plan accordingly with a full social and environmental impact assessment, and a new environmental management plan with emphasis on communications.

263. The oil palm subproject is now well under way and the private investor has proved to be an exceptionally good partner. The nucleus estate is 92 per cent established and the first harvests of ffbs on the nucleus estate and smallholder/outgrower land are expected by early 2010. The limited participation of outgrowers and smallholders remains a concern, but numbers are expected to increase once farmers obtain cash benefits from the harvest. With two years of harvesting before project completion, it is possible that the target numbers of smallholders and outgrowers will be achieved. Any future phase of the project would be able to focus its attention on oil palm development elsewhere.

264. **KOPGT.** Starting from scratch, KOPGT has developed into an effective organization that provides a range of services including farmer organization, extension and loan administration. The current system is working well, with mutually-reinforcing links between farmer organization, extension and credit. The financing system has been adapted to the special circumstances on the island and seems to be working well. It remains to be seen whether these loans can be recovered efficiently; the situation will need to be closely monitored.

265. In the short term, there is a need to consolidate the gains made in establishing KOPGT and to further strengthen it. In particular, as a multifunctional organization, KOPGT will need to increase its learning and agronomic technical skills to help farmers. This is important, as farmers only began harvesting for the first time at the end of 2009 and will need technical support for at least the first five years to ensure the quality of the ffbs delivered to the mill. In addition, KOPGT will need to ensure that its accounting system can record all transactions in real time and provide individual accounting to farmers. It will need to do this without increasing its overall costs, thus improving its operational efficiency. These improvements will help KOPGT become a more professional and dynamic organization, but the main outstanding concern is its financial sustainability, which will need to be addressed urgently.

266. **Traditional Oilseeds Subproject.** The success of this subproject, already outlined above, is remarkable when one considers the difficulties of insurgency and intemperate weather in the project area. Its performance could have been even better with a number of small improvements. The research stations could have released improved sunflower OPVs earlier; the link between the research stations, on-farm trials and the extension work could have been stronger; the phasing-out of free seed and collaboration with private seed suppliers could have been introduced earlier; higher-output oil-pressing machines could have been sourced to maintain interest in cottage processing; and the extension work could have been deepened, with more attention to soil fertility, and broadened as the project progressed. However, the evaluation recognizes that, for reasons external to the project, the DAO resources were increasingly stretched.

267. The two main lessons from this subproject are as follows: First, an integrated value chain approach – even if only partially integrated, as in this case – increases the effectiveness of any one part of the chain and the overall set of linkages, thereby increasing profitability for all actors. The improvements in seed distribution and opportunities for value addition encouraged farmers to increase their area under sunflower, which in turn encouraged more traders and millers to enter the subsector and improved market conditions generally. Second, working through the DAOs enormously scaled up project implementation and increased the number of beneficiaries. Being part of local government, the DAOs were also able to involve political leaders, who gave increased legitimacy to the project; working through a private farmers' and millers' association (UOSPA) facilitated linkages to other private-sector operators, especially the millers.

268. Sunflower production is growing, and is likely to continue given the continuing integration of the value chain and the influx of donors and private-sector efforts to improve weaknesses in the chain. However, there is a clear need for further extension advice to farmers to avoid any long-term decline in soil fertility and to improve their post-harvest handling, storage and marketing. Also, before the end of the project or in the future, it may be difficult to expand support to sunflower into recently reclaimed post-war areas further north. It is outside the remit of this evaluation to make recommendations in this respect; however, the mission notes that operating in a post-conflict environment such as this would require a different mode of implementation and that there are already many donors operating in this area, including in the vegetable oilseed subsector.

269. The NARO research institutes have fulfilled their obligations under the MOU, but have met some challenges. The main problems were lack of sufficient financial and human resources, weak staff capacity and the low priority given to vegetable oil crops. Project resources have enabled more R&D to be carried out and have moved oil crop research higher up the NARO agenda, but this reprioritization does not appear to be matched by increased government funding. The lesson here is that financial injections into weak research institutions are unlikely to be sustainable without assured future funding. Despite the need for continued adaptive research into vegetable oil crops in order to expand seed varieties and maintain seed quality, it is not clear that further investment by IFAD would be justified without stronger government commitment.

270. The performance of UNBS in developing food standards for vegetable oilseeds and promoting awareness of the importance of these standards among producers and processors is highly rated by the evaluation. This work has only been going on for four years and would benefit from further resources to strengthen work on inspection and compliance.

271. **Essential Oils Subproject.** Considerable advances were made in the R&D of different essential oil crops – which was the major objective of the project – but the piloting of processing and marketing these crops showed up bottlenecks in the value chain that needed to be overcome before any commercial development could take place. Apparently there are opportunities for essential oil production in Uganda: there is a demand from industrialists (depending on quality, price, volume and regularity of supply, etc.), and these high-value crops could offer good returns for farmers in areas with few other alternatives. Therefore it would seem reasonable to realise the value of the sunk investment in the R&D of these crops and support further exploration of processing and marketing opportunities for a further period. However, while this work would need to be undertaken in cooperation with the research institute that has been so closely involved to date, it would now require the participation of other implementing partners with industrial and marketing expertise, such as NGOs or private companies.

272. The main lessons from this subproject are that while R&D of new agricultural crops is necessary, it is expensive; and once trials have been undertaken on farmers' land it is difficult to manage their expectations regarding further development. Before launching into larger-scale production, it would be important to research the downstream linkages to ensure that the potential profitability of the crop can be realised. However, such market research requires specific competences and dedicated resources, and cannot be grafted on to the existing responsibilities of researchers or project staff.

273. **Subsectoral advocacy.** The role envisaged for VODC in supporting the subsector outside of VODP was enlightened if premature at the time, and raised conflicts of interest. This role has been largely taken over by OSSUP. The latter organization has wider representation than VODC, and can draw on considerable enthusiasm and energy from its participants. It is working towards defined objectives and targets, and is developing priorities for advocacy and policy dialogue. Although SNV is committed to supporting OSSUP in the near to medium term, resources are limited and increasing membership contributions will not be feasible until tangible benefits are demonstrated for its members. Therefore OSSUP is a good candidate for IFAD support in a possible second-phase project. This experience demonstrates that the roles of project steering and broader subsector support require different types of organization; and, in any case, a broad-based advocacy organization cannot be created by a single sponsor if it is to obtain legitimacy among a wide range of stakeholders.

C. Recommendations

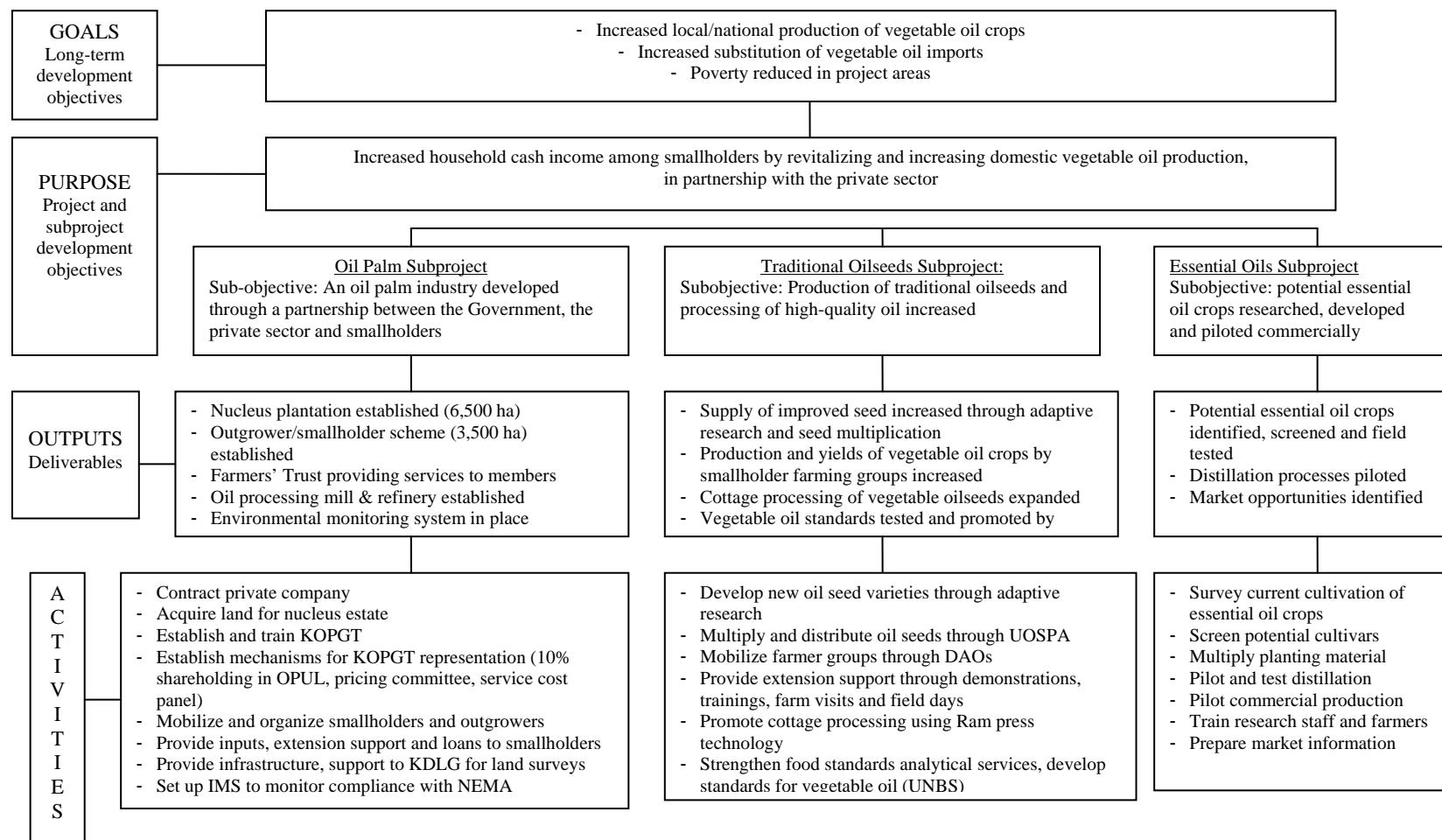
274. By the time VODP has completed in 2011, it will have been in operation for more than 13 years and the delayed oil palm subproject for eight years. Most of the objectives will have been achieved by that time. The remaining years should be dedicated to consolidating these achievements through an effective exit strategy and a more focused second phase. Based on the above findings, the evaluation's recommendations are as follows:

Oil palm (as referred to in paragraphs 261-264): A second phase should support the introduction and expansion of oil palm in new areas where there are good prospects for commercialization, provided lessons are learned from the current phase regarding the importance of adequate opportunities for securing land, effective environmental management and addressing farmers' incentives and constraints.

- (a) **KOPGT** (as referred to in paragraphs 265-266). The urgent priority is to explore means of ensuring the financial sustainability of KOPGT in the immediate future. Given its innovative nature, the financing scheme should be fully assessed, particularly the efficacy and likely duration of the loan recovery mechanism and the need for further professionalization of KOPGT's management and administration. An analysis should be made of the likely demand for future extension services once the oil palm plots have been established, and the need for any further capacity-building for KOPGT extension staff. A medium-term plan should be developed to indicate the long-term scope of extension and financial services and how these can be provided on a sustainable basis; it should also clarify the relationship between KOPGT and KOPGA.
- (b) **Traditional oilseeds** (as referred to in paragraphs 267-271). FAD and the Government should give careful consideration to the need for a second phase, the focus of which should be on helping smallholder farmers to supply crushing material (both sunflower and soybean) to millers. The programme should address concerns about declining soil fertility, and provide training for farmers in the use of fertilizer and other agrochemicals, conservation agriculture and other related activities. There should be support for mechanization and value-addition activities, as well as post-harvest handling and group marketing. IFAD and the Government should continue to support the development of food standards and codes of practice for the vegetable oils subsector through UNBS. In the second phase, there should be stronger focus on promoting direct commercial relations between farmers and private-sector actors in order to promote the long-term sustainability of oilseeds development. If IFAD and the Government consider it necessary to expand this component into the ex-LRA areas further north because of the extent of poverty there and opportunities for successful development of oilseed production, the follow-on project should take account of the need for special skills in post-conflict work and coordination with other donors and NGOs working in the region.
- (c) **Essential oils** (as referred to in paragraphs 272-273). FAD/the Government should consider further support to this component in order to realise value from the research investments made to date. Such support could be made within the second phase of the current project or as a stand-alone grant. A comprehensive value-chain analysis should be undertaken, focusing on bottlenecks in distilling and marketing, and include mitigation of environmental damage arising from fuelwood use in distilling. Other implementing partners should be also involved, possibly including private organizations or NGOs with expertise in industrial processing and marketing.
- (d) **Subsectoral advocacy** (as referred to in paragraph 274). IFAD/the Government should build on the experience being developed by OSSUP so that it can expand its work in promoting information exchange and lesson-learning among the different value-chain actors, and in developing policy dialogue to promote the subsector. IFAD's support could take the form of a grant to SNV in support of OSSUP. Ideally, OSSUP should assume responsibility for monitoring the performance of the vegetable oil subsector and for

compiling reliable statistics on national vegetable oil consumption, import substitution and export diversification. Possible activities might include establishing an information database on these topics; national and regional workshops to identify value-chain bottlenecks and other constraints; and networking with other commodity-based organizations. As OSSUP strengthens its provision of these services, eventually it should be able to change from being a platform to a membership organization and to charge members for its services, thus becoming more financially sustainable in the future.

Project Structure (adapted from Project Logframes)



Data Sources

Time Series M&E data

1. For the traditional oilseeds subproject, since the project began, time series data exist on: the number of benefiting farmers, hectares planted with sunflower, sunflower seed distribution, new farmer groups formed by extension staff, and the number of training sessions, demonstrations, farm visits, and field days conducted. For the oil palm subproject, data are collected regularly on the number of beneficiaries, land surveyed and planted, seedlings planted, fertilizer use, cash disbursed to farmers, farmer meetings and training sessions, publicity activities and road infrastructure improved. For the essential oils subproject, the data cover the number of farmers trained, number cultivating citronella/lemongrass, area cultivated, quantity harvested and processed, litres of oil produced, amount of oil sold, and price.

2. The project made great efforts to improve the quality of the time series data, with training and quality checks on the designated M&E focal points in the DAO offices. In particular, an effort was made to reduce double counting, which might undermine figures on cumulative project performance. However, this may not have been totally resolved.¹ Data quality ultimately relies on the quality of record-keeping by the farmers themselves, whose estimation of acreages is usually imprecise. The incentives of the field officers who were working to DAO targets should also be factored in. The establishment of trends from the time series data has been affected by splitting of the districts, which means that the district definitions are not stable over time. In order to preserve comparability, the evaluation re-amalgamated the districts so that the definitions were standard for all years.

Baseline Studies and Impact Assessment Data

3. A baseline survey (BS) of the traditional oilseeds area was carried out by the M&E Division of the MAAIF Agricultural Planning Department in 1998/1999 covered 540 oilseed-growing households in the six pilot districts. In each district, ten households were selected randomly from a list of oilseed growers in three parishes in three subcounties. The IAS carried out by an independent consultancy firm (Bergen Consult (U) Ltd.) in 2006/2007 covered 616 oil crop beneficiary farmers in nine districts, 22 subcounties and 63 parishes. Potentially, the two surveys offered the possibility of measuring project impact over the eight-year period. Unfortunately, however, there is limited comparability between the two datasets. The main problems are outlined below.

4. **Different sample definitions.** In the BS, the respondents are oilseed-growing heads of household, whereas the IAS also includes other adults. Unfortunately, the IAS does not include data on household headship, so it is not possible to extract the non-heads for comparability. Their inclusion gives a higher number of women in the sample (women represent only 8 per cent of the BS compared with 39 per cent of the IAS) and a slightly different age distribution (more of them are middle-aged and there are fewer older people).

5. By definition, the BS sample included beneficiary and non-beneficiary households (presumably few were beneficiaries as the project had been going for less than a year), whereas the IAS included only VODP beneficiaries. Therefore the latter sample is likely to over-represent VODP-supported activities such as seed varieties planted, seed sources and extension provision.

6. A third source of variation in the sample definition is the inclusion of three VODP extension districts (Mbale, Masindi and Sironko) in the IAS. As the evaluation had access to the raw data of the

¹ For example, the cumulative figure for project beneficiaries is 977,342 farmers. With a total estimated number of households of 840,000 in 2002, this figure would be plausible only if there were several beneficiaries per household, but not if – as the project maintains – there is usually only one per household.

IAS, it was possible to exclude these three districts, thus restoring comparability in terms of the districts covered.

7. **Non-comparable questions.** The BS had 58 questions and the IAS contained 102. Unfortunately, only 16 questions are directly comparable in terms of having the same wording and coding; and, of these, only 14 relate to project performance. The IAS included a much greater range of question topics, such as social empowerment, food security and nutritional status, the gender division of labour, project benefits and sustainability. It also included additional questions on some of the topics covered by the BS (cultivation, marketing, extension and cottage processing). However, it did not repeat some important BS questions such as forms of land tenure, total land cultivation, seasonality of production, agronomic practices, pests and diseases, marketing constraints, willingness to borrow money for oil crops, the number of farm visits by extension staff, or wealth indicators. The last factor was a particularly serious omission, which has made it impossible to quantify improvements in family living standards resulting from the project.

8. Even where similar questions were asked by the IAS, question wording or coding was sometimes changed, further preventing comparability. This affected the data on fertilizer use, views on problems in growing the crop, use of credit, usefulness of demonstrations and the gender/age composition of farmer groups.

9. **Poor-quality data handling.** Little effort was apparently made to supervise the coding of the IAS questionnaire and cleaning the dataset, for it contained many coding errors and different coding practices on the same variables. The evaluation team had to spend considerable time correcting these errors before comparative data could be generated.

10. **Comparisons between the BS and IAS.** Fortunately, the evaluation team had access to the raw IAS data and was able to redefine some variables to improve comparability. After careful scrutiny of the two datasets, comparisons are available for a limited number of variables (14) relating to crop growing, seed use, marketing and extension. Table 2 at the end of this appendix gives the results for those variables that were comparable between the two surveys, and includes information on the structure of the two samples, the number of respondents (N) and missing data (MD) for each question.

PRA social impact study

11. A local PRA expert accompanied the mission on its visit to farmer groups in the traditional oilseeds and essential oils area, and conducted discussions with smaller groups in order to assess social impacts of sunflower and citronella growing at the village and household levels. The groups ranged in size from six to 35, for a total of 164 in all (table 1).

Appendix 2 - Table 1. Farmer Participation in PRA Group Discussions

District	Subcounty	Farmer Groups	M	F	Total
Tororo	Nagongera	Pokong	0	6	6
Mbale	Busiu	Busiu	1	17	18
Soroti	Tubur	Tucoma	4	13	17
Lira	Adekokwok	Oba and Abadmunu farmer groups	18	12	30
	Lira	Loo Kwac farmer group	7	6	13
Apac	Abongmola	Atana women, Amia agro, Riemcan kwere and Achan kweri gweno farmer groups	22	13	35
Masindi	Kiryandongo	Labongo Lworo Displaced Women's Farming Project	5	22	27
	Kigumba	Mpumwe Farmers' Association.	11	7	18
Total	8 subcounties	12 farmer groups	68	96	164

12. Participants were first asked to define the range of land holdings in their community through a general discussion, probing and validating with different individuals; the distribution of households in the various land size categories was identified using stones or leaves. The same technique was used to identify the acreage under sunflower growing within each land holding category. The wealth rankings were established through general discussion, and then in smaller groups they discussed the characteristics of each wealth group using different coloured cards. In general discussion, the descriptions of each wealth group were validated and perceptions of the position of sunflower growers and general benefits from sunflower growing were investigated. Challenges in using this methodology included low literacy, reliance on translations and time needed to explain the questions.

13. These group discussions were followed up by more detailed household interviews representing well-off, less well-off and poor households (the categories were referred to as 'progressive,' 'average' and 'slower') chosen by the farmers themselves. The topics covered were based on a checklist (not a questionnaire) and, while similar to those included in the group discussions, were more detailed. In all, 21 household interviews were conducted, six each in Soroti and Masindi and nine in Lira.

Goal-level Data

14. For an investigation of goal-level impact in the traditional oilseeds project area, the evaluation commissioned a special analysis of household poverty and vegetable oil consumption in the VODP districts from the Economic Policy Research Centre (EPRC), Makerere University. The data were extracted from the Uganda national household survey rounds of 1999/2000, 2002/2003 and 2005/2006. Data were requested for the total national population, total rural population and the 14 districts where VODP had been working. The district definitions were standardized according to the original definition in 1999. However, the Acholi subregion (including Kitgum, Pader, Gulu) was not covered in 1999/2000 due to security problems at that time. Therefore, for comparability over time, data for these Acholi districts are excluded. Data were extracted for each VODP district separately, but the figures were not statistically significant because of the small sample coverage, and are not reported. Therefore data are only presented for 12 'VODP districts' as a group. It should be borne in mind that these were cross-sectional surveys, not a panel, i.e. they are not the same informants in each year.

15. Other data definitions are as follows:

- In 1999/2000, data on cooking oil was captured as single consumption item with ghee. In 2002/2003, 2005/2006 the two items were captured separately. However, consumption of ghee in the IFAD districts is negligible.
- Consumption of food and beverages is captured using the seven days prior to the interview. The consumption of cooking oil is therefore reported using the same reference period.
- Conversion of household specific units of measurements into litres: problems have been experienced with converting some of the reported units of measurement used by households (e.g. unlabelled bottles and polythene bags). This led to a reduction in the number of households used in the analysis of quantities consumed. However, the loss is insignificant.
- Average adult consumption equivalent² is compared with the official poverty line (derived by Appleton, 2001) to determine poverty status.
- All population estimates are projected from the sample survey respondents, using sample weights from the Uganda Bureau of Statistics.
- The VODP district figures refer to rural areas only.

² The technical term is consumption expenditure per adult equivalent (CPAE).

Appendix 2 - Table 2. Comparison of Results for Baseline (1998/1999) and IAS (2006/2007)

BASELINE (1998/1999)	IMPACT ASSESSMENT STUDY (2006/2007)
Sample definition: 540 oil crop growing <i>HHH</i> in 6 districts, 3 subcounties and 3 parishes (N=540)	Sample definition: 616 oil-crop growing VODP beneficiary farmers in 9 districts, 22 subcounties and 63 parishes. N=407 (pilot districts only)
Personal characteristics (household heads) (N=540)	Personal characteristics (beneficiaries) (N=407)
<i>Gender (HHH):</i> M = 92% F = 8%	<i>Gender:</i> M = 61% F = 39%
<i>Age (HHH):</i> <30 = 24%, 31-50 = 47%, 51+ = 29%	<i>Age:</i> <30 = 26%, 31-50 = 60%, 51+ = 14%
<i>Education (HHH):</i> None = 10%, Primary = 58%, Post primary = 32%	<i>Education:</i> None = 16%, Primary = 53%, Post primary = 31%
Crop growing	Crop growing
% sample growing sunflower: 39% (N=212)	% sample growing sunflower: 92% (N=373)
Total acres planted with sunflower: 364 (1 st and 2 nd seasons, pure & mixed stands)	Total acres planted with sunflower: 632 (N=297 MD=76)
Total acres planted per respondent: 0.67 acres	Total acres planted per respondent: 2.12 acres
# harvested (kg) : 50,851 kg (1 st and 2 nd seasons, pure & mixed stands)	# harvested (kg): 181,399 kg (N=297 MD=76)
Yield (kg/acre): 139.7	Yield (kg/acre) : 277.6 (N=297 MD=76)
Seed used	Seed used
<i>Sunflower seed varieties planted:</i> 'Sunfola' = 49%, Local = 47%, Other (own seed) = 4% (N=212)	<i>Sunflower seed varieties planted:</i> 'Sunfola' = 58%, Hybrid = 30%, Local = 12% Other (own seed) = 0% (N=337, MD=36)
<i>Main source of sunflower seed:</i> UOSPA = 27%, Local market = 39%, Other (own seed) = 33% (N=212)	<i>Main source of sunflower seed:</i> UOSPA = 11%, Local market = 7%, Other (institutional) = 82% (of which, private companies 19%, gov't 55%, NGOs 8%) (N=368 MD=5)
<i>How acquired:</i> cash = 55%, credit = 12%, free = 33% (N=212)	<i>How acquired:</i> cash = 44%, credit = 4%, free = 53% (N=373)
Marketing	Marketing
<i>Main buyers of sunflower</i> (those that had marketed sunflower the previous season): Millers = 21%, Agents = 52%, Others = 26% (Ram press owners/UOSPA) (N=162)	<i>Main buyers of sunflower</i> (all respondents): Millers = 35%, Agents = 51%, Others = 5% (N=354, MD=19)
<i>How paid:</i> Cash = 78%, Credit = 18%, Kind = 4% (N=163)	<i>How paid:</i> Cash = 89%, Credit = 6%, Kind = 6% (N = 360 MD=13)
Extension	Extension
<i>Membership of a farmer group</i> (all growers): 40% of sample (N=217)	<i>Membership of a farmer group</i> (all growers): 70% of sample (N=407)
<i>Attendance at training sessions</i> (all growers): 7% of sample (N=35)	<i>Attendance at training sessions</i> (all growers): 73% of sample (N=407)
<i>Training providers:</i> DAOs = 23%, UOSPA = 51%, UNFA = 11%, Others = 14% (N=35)	<i>Training providers:</i> DAOs = 76%, UOSPA = 12%, UNFA = 1% Others = 11% (of which Mukwano/Agricultural Productivity Enhancement Programme 8%)(N=407)
<i>Attendance at demonstrations:</i> 11% of total respondents (N=57)	<i>Attendance at demonstrations:</i> 61% of total respondents (N=407)

N= Number of respondents; MD= Missing data; HHH= household head.

Source: Baseline study (published), IAS raw data.

VODP Logical Frameworks

1. The initial logframe was prepared at appraisal in 1997; thereafter it was modified twice, once in 2005 (for the reappraisal of the oil palm subproject) and then in December 2008. Each revision has improved it, but it remains weak. The logframe's many problems include: a confusion of objectives; an over-focus on the oil palm component; weak linkage between activities, outputs and objectives; poorly specified indicators; and a lack of targets.

2. **Confusion of objectives.** The project has a multiplicity of objectives, of varying levels of ambition, which has led to a loss of focus and made it difficult to construct logical links to outputs. Table 1 shows how the project's objectives have varied in different strategic documents and the three logframes. In its narrowest formulation, the project's overall objective (goal) focuses on increasing smallholder production of vegetable oil crops, but in its widest, it includes the revitalization of the vegetable oil subsector, import substitution, export diversification and improvements in the health of the Ugandan population. The project has a number of specific development objectives, ranging from two or three in the various logframes to eight listed in the appraisal report and the PCO's annual reports. This situation is not helped by the different terms used to refer to project development goals and purpose/specific development objectives.

3. A good logframe should distinguish between a project's purpose/development objective and the broader goal effects that would occur if the purpose were to be achieved. There would be only one purpose/development objective to which all outputs and activities are oriented. The difference between the goal and the purpose is that the project is accountable for its contribution to the latter whereas it is not for goal-level effects, which depend on a much wider set of factors than project performance. In the case of VODP, import substitution, export diversification and improved nutrition of the Uganda population are goal-level effects to which the project contributes but for which it is not accountable. On the other hand, the project is accountable for the achievement of its purpose (improved smallholder production of vegetable oil crops). Unfortunately the project has had a number of objectives at the purpose level and has mixed them up with goal-level objectives, so it is unclear what it is accountable for.¹

4. The proliferation of objectives at the purpose level reflects the multicomponent structure of the project, as is suggested in the 2008 logframe (see table 1). Ideally, the project should have retained a single purpose and identified subobjectives for the three subprojects. In that way their contribution to the purpose would have been clearer.

5. **Component structure.** The original three-component project structure was not reflected in the first logframe. It was presented as a single project, merging together outputs and activities for the different components. Most of the emphasis was placed on the oil palm component, and the other two components were very poorly specified. The 2005 logframe, produced after the reappraisal and appended to the technical review report, focused exclusively on oil palm. It was effectively a logframe for a single subproject and had a more coherent – if over-detailed – results chain. However, the weak specification of the rest of the project was not corrected at that time. The 2008 logframe differentiated more explicitly between the oil palm and VODF components (traditional oilseeds and essential oils) at the level of purpose objectives and outputs, but the results chains for the second component and the institutional support functions were only partially developed. A more appropriate structure would have set out results chains for the traditional oilseeds and essential oils subprojects in the same way as for the oil palm subproject, as illustrated in appendix 1.

¹ This multiplicity of purpose-level objectives caused problems for the evaluation's assessment of effectiveness. It was resolved by basing the assessments on the 1997 logframe, which was the clearest and most coherent.

6. **Outputs and activities.** For oil palm, the results chain between objectives, outputs and activities was fairly complete in all the project logframes, although there were too many outputs in the 2005 version. It was very poor for the traditional oilseeds and essential oils subprojects, where only two outputs were specified and almost no activities. No outputs were specified for the NARO research institutes, UNBS or the VODC in any of the logframes, and their link to the project purpose has therefore been weak.

7. **Indicators and targets.** The original logframe indicators were extremely general (definitely not SMART) and contained very few targets. The only specific targets related to the hectares expected to be planted with oil palm by the nucleus estate and by smallholders/outgrowers, and even there they were not time bound. The 2008 version is a great improvement in this respect, although some of the indicators are not measurable and there is a tendency to confuse indicators for outputs and activities. Despite the considerable effort by the project to collect good M&E data, information is not available for many of the indicators.

8. **Project reporting and monitoring.** A good logframe should provide the basis for project planning, monitoring, reporting and supervision. However, in the case of VODP, the logframe does not appear to have been used as a tool for any of these functions. M&E data have been collected on the basis of local government AWP/B targets (which vary from year to year) rather than logframe indicators. Project reporting through the annual reports tends to be activity-based within the framework of the original appraisal objectives. The logframe does not appear to have been used as a basis for drawing up the MOUs with implementing partners, who have lacked clarity about their link to project objectives and targets for reaching them. Normally, the logframe would be expected to be reviewed by visiting supervision missions and updated to reflect project changes or amended indicators and targets. However, this was not done by either of the cooperating institutions; nor was it reviewed by the MTR. Hence its original weaknesses were not corrected until recently, and even so many flaws remain.²

VODP Development Objectives

A. Objectives set out in the Appraisal Report (1997, para. 64)

‘The project would expand the production of oil-bearing crops with particular emphasis on the participation of smallholders and private sector processors.

Specifically the project would seek to:

- Reduce poverty and increase farmer incomes by involving smallholder growers in oil palm industry
- Facilitate the enabling environment to attract private sector investment in oil palm development with a view to reducing imports of vegetable oil and effecting substantial savings in foreign exchange
- Promote private sector agro-industrial investment through the introduction of industrial oil processing mills with high environmental standards
- Improve delivery mechanisms and availability of credit and improved seeds
- Improve efficiency and impact of supporting services through support for research and extension
- Develop the potential for sunflower and other arable oil seeds, and provide interested smallholder farmers, particularly women, with appropriate technologies to optimise oil extraction from these crops
- Stimulate and support the development of the raw material base and know-how for the subsequent commercial extraction of essential oils, and
- Promote and facilitate the interaction between the interested parties through the creation of a national industry-based and eventually industry-financed consultative body that would advise government on the subsector’s development priorities.’

B. Objectives set out in the President’s Report (1997, para. 18)

‘The main thrust of the proposed eight-year project is to increase cash income among smallholders by revitalizing and increasing domestic vegetable production.

More specifically, the project will:

- (a) Develop an oil palm industry chiefly promoting partnership between smallholder growers and private sector processors, with GOU/IFAD playing catalytic roles

² The exception here was the December 2008 supervision mission, which reformulated the logframe.

- (b) Introduce industrial size mills that are energy-efficient and of high environmental standards for the efficient and cost-effective processing of fresh fruit bunches;
- (c) Develop with NGO support the potential for smallholder vegetable oil and other arable oilseeds production and processing
- (d) Catalyse and support the development of smallholder-produced raw material base and know-how for the subsequent commercial extraction of essential oils; and
- (e) Support Government effort at establishing a consultative body (VODC) to facilitate the interaction between farmers, trade associations, processors, financial institutions, NGOs and other principal actors involved in shaping the development of the vegetable oil subsector.’

C. Objectives Listed by the PCO (2008 Annual Report)

Broad Objectives

- Import substitution through increased domestic production of vegetable oils
- Increased rural incomes, hence address rural poverty
- Improve the health of the population through increased vegetable oil intake
- Export diversification

Specific Objectives (from appraisal document)

- Reduce poverty and increase farmer incomes by involving smallholder growers in the oil crop production industry
- Facilitate the enabling environment to attract private-sector investment in oil palm development with a view to reducing imports of vegetable oil and effecting savings in foreign exchange
- Promote private-sector agroindustrial investment through the introduction of industrial oil processing mills with high environmental standards
- Improve delivery mechanisms and availability of credit and improved seeds
- Develop the potential of sunflower and other arable oil seeds, and provide interested smallholder farmers, particularly women, with appropriate technologies to optimize oil extraction from these crops
- Stimulate and support the development of the raw material base and know-how for the subsequent commercial extraction of essential oils
- Promote and facilitate the interaction between the interested parties through the creation of a national industry-based, and eventually industry-financed, consultative body that would advise government on the subsector/s development priorities

D. Objectives set out in Project Logframes

Overall Project Objectives

<u>1997</u>	<u>2005</u>	<u>2008</u>
Increase household cash income among smallholders derived from palm oil and other vegetable oil production	Improve livelihoods of the Ugandan population, especially the nutrition status of the poor	Expand the production of oil-bearing crops, with particular emphasis on the participation of smallholders and private-sector processors
Increase local production of vegetable oils	Reduce the national cost burden of importing vegetable oils and save foreign exchange	

Purpose (specific/development objective)

<u>1997</u>	<u>2005</u>	<u>2008</u>
Develop a palm oil industry, which is well-integrated in the subsector, to the benefit of smallholder growers and private-sector processors	<u>Oil palm component</u> Stimulate private-sector investment to contribute to an increase in domestic supply of vegetable oils and improved accessibility by poor consumers, with effective and commercially-viable participation of smallholder farmers in the enterprise	<u>Component A</u> Develop an oil palm industry involving smallholder growers and private-sector processors and introduction of industrial mills with high environmental standards.
Optimize yields and oil extraction technology for sunflower and other arable oilseeds	Increase incomes of small-scale oil palm growers and poor people employed in oil palm production and processing operations	<u>Component B</u> Develop the potential for sunflower and other arable oilseeds and provide interested farmers, particularly women, with appropriate technologies to optimize oil extraction from these

<u>1997</u>	<u>2005</u>	<u>2008</u>
	<p>Improve wellbeing of district populace through improved access to social/public infrastructure, services and economic opportunities stimulated by the transformation of the local economy</p>	<p>crops, and explore the potential for essential oil development</p> <p>Promote and facilitate interaction among interested parties through the creation of a national industry-based and industry-financed consultative body that would advise government on the subsector's development priorities</p>

Appendix 3 - Table 1. VODP Logical Framework at Appraisal (1997)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Chief Assumptions
<p>I. Overall objective Increased household cash income among smallholders derived from palm oil and other vegetable oil production</p> <p>Increase in local production of vegetable oils</p>	<ul style="list-style-type: none"> - Household income in project area - Share of locally produced vegetable oils/total consumption 	<ul style="list-style-type: none"> - Income surveys - Trade and consumption statistics 	<ul style="list-style-type: none"> - CPO import price does not fall below local cost of production
<p>II. Purpose (specific objectives) Develop a palm oil industry that is well-integrated in the subsector, to the benefit of smallholder growers and private-sector processors</p> <p>Optimize yields and oil extraction technology for sunflower and other arable oilseeds</p>	<ul style="list-style-type: none"> - Productivity of smallholder oil-palm plantations - Productivity of estate-oil palm plantations and processing - Incremental farmer income from vegetable oil production 	<ul style="list-style-type: none"> - Project evaluation(s) - Annual reports - Income surveys - Reports and minutes of VODC 	<ul style="list-style-type: none"> - Vegetable oil production contributes significantly to farm income
<p>III. Outputs</p> <ul style="list-style-type: none"> - 7500 ha of smallholder oil-palm are in production - 2000 ha of estate oil-palm are in production - Efficient rural financial services are in place at oil-palm locations - Farmers' Trusts functioning, holding 10% of UOPC equity - Access and ffb collection roads - Private palm oil mills process all local ffb production - Ffb prices paid are established by national pricing committee - Environment and resource management plans - VODC brings subsector stakeholders together - Increase in arable oil-seed production - Raised arable oil-seed processing efficiency 	<ul style="list-style-type: none"> - Number of smallholders participating - Area of oil palm established - Amount of palm oil and kernel produced - Credit take-up and repayment - Number of environmental control personnel trained - Length of roads constructed - Number of subsector stakeholders represented in VODC - Area planted to and/or total yield of improved arable oil seed cultivars - No of Ram Presses (or equivalent) distributed and operating - No of VODC sessions with/submissions to APC 	<ul style="list-style-type: none"> - Project monitoring system - Quarterly and annual reports - Credit records - Record-keeping of a sample of oil-palm growers 	<ul style="list-style-type: none"> - Markets operate (including effective charging of CPO import tax) - The Farmers' Trusts and pricing committee effectively increase the smallholders' bargaining position vs. UOPC

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Chief Assumptions
<p>IV. Activities</p> <ul style="list-style-type: none"> - Establish smallholder oil palm plots - Establish UOPC estates and oil mills - Construct access and ffb collection roads - Train smallholders, UOPC, MAAIF and COREC/NARO staff - Establish private banking outlets at oil palm locations - Provide social infrastructure and housing grants - Support the environmental control agencies, including training - Assist formation and operation of Farmers' Trusts - Establish national pricing committee for ffb - Initiate creation of Vegetable Oil Development Council (VODC) - Support vegetable oil research - Assist sunflower and other oilseeds extension (cultivation and oil extraction), adaptive research, seed multiplication and distribution - Support the Directorates of Crop Resources and Extension, MAAIF, to monitor the project implementation - Support to districts 	<p>Inputs</p> <ul style="list-style-type: none"> - Land clearing and preparation equipment - Oil-palm seedlings and production inputs - Credit in kind to smallholders - Technical assistance - Vehicles - Equipment and materials - Civil works - Training - Roads machinery - Studies - Institutional support, including NGOs - Operating costs and incremental salaries 	<ul style="list-style-type: none"> - Quarterly and annual reports - Supervision reports 	<ul style="list-style-type: none"> - Timely provision of inputs and investments - Timely completion of required roads and ferry access to project areas - Political and economical stability - Continued market-oriented government policy - Interest of private sector is maintained

Revised Logical Framework – Oil Palm Component Bugala Island

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Key Assumptions
<p>DEVELOPMENT GOALS:</p> <ul style="list-style-type: none"> - Improve livelihoods of the Ugandan population, especially the nutrition status of the poor - Reduce the national cost burden of importation of vegetable oils and save foreign exchange 	<p>Nutrition status and consumption levels of vegetable oils</p> <p>% of and \$ spent on imported vegetable oils against total market supply in the country</p>	<p>National nutritional statistics</p> <p>National statistics on trade and domestic market info</p>	<p>Political will to push forward PMA and PEAP policies/reforms</p> <p>Macro-economic conditions continue stable and liberal; and no inordinate climatic adversity</p>
<p>DEVELOPMENT OBJECTIVES:</p> <p>Stimulate private sector investment to contribute to an increase in domestic supply of vegetable oils and the improved accessibility by poor consumers, with effective and commercially viable participation of smallholder farmers in the enterprise.</p> <p>Increase incomes of the small-scale oil palm growers and those poor employed in the oil palm production and processing operations</p> <p>Improve well-being of the district populace through improved access to social/public infrastructure, services and economic opportunities stimulated by the transformation of the local economy</p>	<p>Level of and returns to private sector investment; # and performance (yields and credit repayment) of participating smallholder farmers</p> <p>Changes in HH assets</p> <p># of population with improved access to key social/public infrastructure (clinics, schools, roads, etc.)</p> <p># and types of services and economic activities initiated</p>	<p>Company and KOPGT records; VODP M&E data</p> <p>Benchmark/impact surveys</p> <p>Benchmark/impact surveys, District records</p>	<p>Financial position of the private sector investor remains stable</p> <p>No drastic change in international vegetable oil market</p> <p>Stability of other income factors, at least until meaningful oil palm benefits flow</p> <p>Support from central and local governments; proper maintenance of public infrastructure</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Key Assumptions
OUTPUTS :			
6 500 ha of oil palm nucleus estate established and effectively and efficiently managed	ha of nucleus estate over years fib yield over years	OPUL records	Financial position of the company remain stable
3 500 ha of outgrower/smallholder plantations established and effectively and efficiently managed	ha of smallholder/outgrower plantations over years; # and performance (yields as well as credit repayment) of participating smallholder farmers	VODP M&E data; OPUL and KOPGT records; bank records	No severe drought, pest occurrence
Oil processing mill (with capacity of 30 tph by 2009, upgraded to 60 tph by 2012) operating efficiently and in a environmentally sound manner	fib processed in the mill; CPO output of at least 33 000 t/year at peak; effluent levels from the mill	OPUL mill records	Non-interference, no distortion from external sources, local or national; resolution of conflicting interests/disputes.
An organization representing the interest of small-scale oil palm growers (KOPGT) put in place and fully operational	KOPGT membership; KOPGT eventually operating without external funding; types and levels of activities undertaken by KOPGT; points/contents consulted and negotiated between OPUL and KOPGT	KOPGT records; KOPGT financial reports and annual reports; various meeting minutes	
Key social/public infrastructure constructed/improved and with investment by the private sector company and/or the local government and effectively utilized by local population	Types and number of infrastructure constructed/improved and # of people utilizing them	Local government records, reports; survey	
Fair employment opportunities associated with oil palm development, production and processing generated for the poor population of the Kalangala district, as well as adjacent areas	# of people employed and wage levels	OPUL payroll data; interview with oil palm growers	
National technical capacity and expertise for oil palm enterprises developed	# of local personnel with sufficient technical expertise	Interview with OPUL personnel	
Capacity of local government for effective service provision to its population enhanced	Level and types of district expenditures	Local governments annual plans/budgets and periodic reports	Local government office properly staffed Good governance maintained

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Key Assumptions
<p>ACTIVITIES : (OPUL/BIDCO) Develop a nursery for oil palm seedlings</p> <p>(GoU) Acquire 6 500 ha of lands for lease to the private sector investor for nucleus estate development</p> <p>OPUL/BIDCO develop nucleus estate (6 500 ha) in an environmentally sound manner</p> <p>Mobilise and register smallholder farmers to participate in oil palm enterprise in partnership with the private sector investor</p> <p>Prepare land, plant quality oil palm seedlings in smallholders' lands (target 3 500 ha) and manage plantations – with effective support by the private sector investor</p> <p>Provide support to KOPGT for organizational capacity building and to the establishment of outgrower units/divisions, smallholder groups</p> <p>Provide training to local technical staff (OPUL staff, Dept of Agriculture, KOPGT, etc).</p> <p>Provision of vehicles, equipment and materials: for VODP coordination/management; for KOPGT; and for KDLGA for social/general infrastructure</p> <p>Regularly monitor the compliance with the NEMA condition, environmental and socio-economic effects, biodiversity impacts and conservation or improvement of forest and other ecological systems</p> <p>MAAIF/VODP Coordination Office effectively operating for component planning, direction, support, administration and M&E</p>	<p># of seedlings raised</p> <p>ha handed over to OPUL</p> <p>ha cleared/developed in line with environmental regulations</p> <p># of farmers participating in sensitization meetings and registered with KOPGT; ha of land committed</p> <p>ha under SH plantations and costs of inputs and services provided</p> <p>Types of training and support provided to KOPGT and its smaller units/divisions</p> <p># of people trained</p> <p>Targets filled for materials, vehicles and equipment procured on time</p> <p># and types of surveys undertaken and reports prepared</p> <p>Quality AWPB prepared on time, targets largely achieved</p>	<p>Company records</p> <p>VODP reports, OPUL records</p> <p>VODP reports, IMS reports, NEMA reports</p> <p>VODP, District and KOPGT records, progress reports; training agency records.</p> <p>OPUL, KOPGT, VODP records</p> <p>VODP M&E data; KOPGT records</p> <p>VODP M&E data; OPUL records</p> <p>VODP M&E data; district and KOPGT records on assets and works tendered</p> <p>VODP M&E date; IMS reports; NEMA reports</p> <p>VODP AWPB, progress reports; supervision missions and reports; stakeholder interviews; IFAD loan disbursement</p>	

2008 Updated Logical Framework: progress against objectives, outcomes and outputs (Supervision Mission, December 2008)

Narrative Summary	Verifiable Indicators	Means of Verification	Assumptions/Risks
Project Goal:			
Expand the production of oil-bearing crops, with particular emphasis on the participation of smallholders and private-sector processors.	<ul style="list-style-type: none"> ▪ Increase in household asset ownership. ▪ 63,500 smallholder producers of oilseeds crops linked to markets ▪ Increase in tons of national production of vegetable oils ▪ Baseline in 1998, 2.3 kg per capita. At project completion, increased by 15% in rural areas and 70% nationally. 	<ul style="list-style-type: none"> ▪ Household IAS ▪ Project M&E database. ▪ Baseline studies and project completion report ▪ BIDCO Uganda Ltd Refinery – provide figures on local purchases of oil palm ▪ Mukwano – provide figures on purchases of local vegetable oils ▪ FAO food balance sheet 	<ul style="list-style-type: none"> ▪ Absence of external economic shocks.
Purpose/Objectives:			
<p><u>Component A – Oil Palm Development</u></p> <p>Develop an oil palm industry involving smallholder growers and private-sector processors and introduction of industrial mills with high environmental standards.</p> <p><u>Component B – Vegetable Oil Development Fund</u></p> <p>Develop the potential for sunflowers and other arable oilseeds and provide interested farmers, particularly women, with appropriate technologies to optimize oil extraction from these crops, and explore the potential for essential oil development</p> <p>Promote and facilitate interaction among interested parties through creation of a national industry-based and industry-financed consultative body that would advise government on the subsector's development priorities</p>	<p><u>Component A</u></p> <ul style="list-style-type: none"> ▪ 2,500 jobs created at the nucleus estate ▪ Smallholders/outgrowers achieved 6.5 t of yields per hectare five years after oil palm planting (9 t after six years. 11 t after seven years. 14.5 after 10 years - peak production capacity). ▪ Nucleus estate achieved 5 t of yields per hectare five years after planting. (11 t after six years. 18 t after 9 years - peak production capacity). ▪ 800 smallholders/outgrowers reporting improved farm profitability five years after oil palm planting. ▪ By end-2009, an industrial oil extraction mill is constructed with a capacity of 10 t/hour, upgradeable, able to recycle all industrial waste. ▪ Compliance with NEMA environmental conditions for oil palm mill construction approval ▪ Proportion of branded production increased and increased number of service contracts established (market-driven indicator) ▪ Value of sold rural produce <p><u>Component B</u></p> <ul style="list-style-type: none"> ▪ N° processing equipment used by N° farmers groups ▪ 56,600 ha of land cultivated under sunflower seeds/soybean by year ▪ 60,000 farmers in the six districts growing sunflower seeds or soybean for commercial activities (of which 50% are women) ▪ N° farmers reporting improved farm profitability ▪ Increased yields at the farm level ▪ N° essential oil crop farmers reported improved farm profitability 	<ul style="list-style-type: none"> ▪ OPUL database ▪ KOPGT database ▪ Project M&E database. ▪ Project progress and annual reports <ul style="list-style-type: none"> ▪ Household survey ▪ Supervision reports <ul style="list-style-type: none"> ▪ Bidco database ▪ KOPGT database on purchase of ffbs <ul style="list-style-type: none"> ▪ Household survey 	<ul style="list-style-type: none"> ▪ Liberal economic policies continue. ▪ Financial position of the private-sector investor remains stable ▪ No drastic price changes in the international vegetable oil market ▪ No deterioration in external trade routes.

Outputs:																																			
<p>A1 subcomponent: nucleus estates development Establish 6,500 ha of oil palm nucleus estate; and build oil mill on Bugala Island.</p> <p>A2 subcomponent: smallholder/outgrower development Establish 3,500 ha of smallholder/outgrower oil palm scheme</p> <p>B1 subcomponent: traditional oil seeds crops * This is based on the needs of each of the 23 districts. Target will be stipulated in the VODP AWP/Bs.</p> <p>B2 Sub-Component: Essential Oil Development</p>	<p>A1:</p> <ul style="list-style-type: none"> ▪ 6,500 ha. of land available ▪ 6,500 ha. of land planted <p>A2:</p> <ul style="list-style-type: none"> ▪ 3,500 ha of land planted by 800 households (2700 ha. by smallholders and 800 ha. By outgrowers). ▪ OPUL trained 12 KOPGT field officers in oil palm planting and maintenance; fertilizer application and weeding; harvesting and fund management. ▪ 800 households trained in oil palm production and fund management by KOPGT ▪ 800 smallholders/outgrowers have received loans for a total value of US\$3 million. <p>B1:</p> <ul style="list-style-type: none"> ▪ 5,500 farmer groups mobilized with approximately 15-20 farmers per group (half of which are women). ▪ N° farmers trained in N° and type of modules in 23 districts ▪ N° demonstrations for N° farmers in 23 districts ▪ N° on-farm trainings/farm visits provided for N° farmers in 23 districts. ▪ N° farmers visited educational sites ▪ N° ha of sunflower/soy been seeds planted by N° farmers ▪ N° of varieties released by both NaSARRI and NaCRRI <p>B2:</p> <ul style="list-style-type: none"> ▪ N° essential oil varieties screened by research ▪ N° hectares of identified varieties cultivated by N° farmers in Tororo, Pallisa and Lira districts ▪ Litres of essential oils distilled by N° farmers. 	<p>A1:</p> <ul style="list-style-type: none"> ▪ Kalangala District Agriculture Officer ▪ District Surveyor <p>A2:</p> <ul style="list-style-type: none"> ▪ KOPGT monthly reports ▪ OPUL database and KOPGT database. ▪ Project M&E database <p>B1:</p> <ul style="list-style-type: none"> ▪ 23 district quarterly and annual progress reports ▪ Quarter and annual progress reports by NaSARRI and NaCRRI ▪ M&E database <p>B2:</p> <ul style="list-style-type: none"> ▪ Quarterly and annual progress reports by NaCRRI ▪ Subsector impact studies ▪ PCO case studies ▪ PCO six-monthly/annual progress reports 	<p>A1,A2:</p> <ul style="list-style-type: none"> ▪ Political will to engage in oil palm development ▪ Stakeholder commitment ▪ Competitiveness of oil palm crop remains high. ▪ Climate remain stable <p>B1,B2:</p> <ul style="list-style-type: none"> ▪ Climate remain stable ▪ Security in north and north-east remains stable ▪ There will be field extension workers (FEWs) in the 23 Districts to work on VODP. 																																
<p>Inputs by Component:</p>	<p>Inputs by Component:</p>	<p>Inputs by Category</p>	<p>Inputs by Category</p>																																
<p>Human resources: Total Staff estimates: 15 VODP staff, of which six seconded from MAIIF. (1 Project Coordinator; 1 M&E Officer; 3 accounting staff; 2 technical officers, 1 administrator, 1 procurement assistant; 2 office attendants; 4 drivers)</p>	<p>Costs by Component:</p> <table border="0"> <tr> <td>Oil palm development:</td> <td>US\$10.7 million</td> </tr> <tr> <td>VODF:</td> <td>US\$ 6.6 million</td> </tr> <tr> <td>Institutional Support:</td> <td>US\$ 2.4 million</td> </tr> <tr> <td>TOTAL:</td> <td>US\$19.7 million</td> </tr> </table> <p>Project completion: September 30, 2009</p>	Oil palm development:	US\$10.7 million	VODF:	US\$ 6.6 million	Institutional Support:	US\$ 2.4 million	TOTAL:	US\$19.7 million	<p>Cost by category in SDR:</p> <table border="0"> <tr> <td>Vehicles and equipment:</td> <td>SDR 1 730 000</td> </tr> <tr> <td>Civil works:</td> <td>SDR 600 000</td> </tr> <tr> <td>Consultants' services, training and studies</td> <td>SDR 700 000</td> </tr> <tr> <td>Operating costs:</td> <td>SDR 1 600 000</td> </tr> <tr> <td>Sector development fund:</td> <td>SDR 2 300 000</td> </tr> <tr> <td>Oil palm development support</td> <td>SDR 6 700 000</td> </tr> <tr> <td>Unallocated:</td> <td>SDR 720 000</td> </tr> <tr> <td>TOTAL:</td> <td>SDR 14 350 000</td> </tr> </table>	Vehicles and equipment:	SDR 1 730 000	Civil works:	SDR 600 000	Consultants' services, training and studies	SDR 700 000	Operating costs:	SDR 1 600 000	Sector development fund:	SDR 2 300 000	Oil palm development support	SDR 6 700 000	Unallocated:	SDR 720 000	TOTAL:	SDR 14 350 000	<table border="0"> <tr> <td>SDR 1 730 000</td> </tr> <tr> <td>SDR 600 000</td> </tr> <tr> <td>SDR 700 000</td> </tr> <tr> <td>SDR 1 600 000</td> </tr> <tr> <td>SDR 2 300 000</td> </tr> <tr> <td>SDR 6 700 000</td> </tr> <tr> <td>SDR 720 000</td> </tr> <tr> <td>SDR 14 350 000</td> </tr> </table>	SDR 1 730 000	SDR 600 000	SDR 700 000	SDR 1 600 000	SDR 2 300 000	SDR 6 700 000	SDR 720 000	SDR 14 350 000
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**Summary of Implementation Results
(for Traditional Oilseeds and Essential Oils Subprojects)**

Traditional Oilseeds Subproject

(a) Adaptive research (implemented by NaSARRI and NaCRRRI)

Intended activities (as per MOU): Select and develop an open-pollinated variety (OPV) of sunflower to replace 'Sunfola' test and release high-yielding varieties of sunflower, groundnut, sesame and soybean; produce breeder/foundation seed for further multiplication; test and develop improved agronomic practices (bird-scaring devices, soil fertility and fertilizer application, ploughing systems, integrated pest management (IPM), optimum intercropping and crop-rotation regimes)

Results:

- Seed varieties released:
Sunflower (hybrid): PAN 7351 (2003); DK 4040, DKF 68-22, AGSUN 8251 (2007);
Sunflower (OPV) 'Sunfola' purified annually from 2005.
Sesame: Sesim I (2001), Sesim II (2003)
Groundnut: Serenut 3R and Serenut 4T (2002); Serenut 1 and Serenut 2 purification expected 2010
Soybean: Maksoy 1N and Namsoy 4M (2004); Maksoy 2N (2008)
- Two alternative OPVs to 'Sunfola' tested and rejected because of low yields. Two more in pipeline.
- Revolving fund set up (US\$16 million at November 2008) to use funds from sale of foundation seed for further research
- Little on agronomic practices

(b) Seed multiplication and distribution (implemented by UOSPA)

Intended activities (as per MOU): Multiply breeder system via contract farmers; distribute seed to farmers' groups via DAOs; train extension agents and farmers groups

Results:

- 548,721 kg of 'Sunfola' seed and 8,000 kg of soybean seed distributed to farmers' groups
- Seed was initially sold to farmers, but was distributed free after 2002/2003 as part of the Government's Poverty Action Fund (PAF) policy.
- Seed distribution increased steadily to 2004-2005, stabilized at a lower level, then fell by half in 2007/2008, reflecting a policy of gradual withdrawal from free seed distribution

(c) General farmer extension and support (implemented by DAOs)

Intended activities: Form new farmer groups; carry out farmer training, establish demonstration plots; organize farm visits and field days

Results:

- 5,906 new farmer groups formed over the project period; 28% of the members were women
- 8,542 training sessions carried out; 40% of participants were women
- Gradual broadening of training activity from agronomic practices to group dynamics and PPM&E.
- 7,944 demonstration plots established; 53,388 farm visits and 1,393 field days.

(d) Cottage processing (implemented by AT-U)

Intended activities (as per MOU): Distribute Ram presses to farmer groups; train extension agents, farmers, artisans and traders in the operation and maintenance of ram presses

Results:

- 343 Ram presses distributed; not all currently operating
- Extension staff in 14 districts trained, plus 40 enumerators and 11 subject specialists
- Some individual farmers purchase Ram presses on their own account
- A revolving fund established to enable further purchases of Ram presses
- Distribution network closed down after 2002

(e) Development of food standards (implemented by UNBS)

Intended activities (as per MOU): Develop standards for the subsector (raw material, products and by-products); increase awareness and knowledge on standards and quality; train quality assurance personnel for oil processors and other stakeholders; establish a sustainable quality assurance system in the sector; increase productivity with reduced losses; contribute to increased competitiveness in the subsector through increased certification of vegetable oils.

Results:

- State-of-the-art chromatography equipment installed for food analysis
- Staff trained
- 28 product-quality standards specified and published for sunflower, sesame and groundnut
- Other standards under development for post-harvest handling, storage, hygiene and labelling
- Guidelines drafted for food manufacturing practices for small and medium vegetable oil mills.
- Vegetable oil processing quality-control manual drafted
- 35 oil mills routinely inspected every 2-3 months
- Full certification of three mills expected
- Over 100 local government staff, millers, machine operators and traders participated in sensitization and training workshops
- Code of practice for subsector millers under development, in collaboration with NUOMA.

(f) Other activities

- Savings and credit: sensitization workshops held for district staff and group leaders in all subprojects; farmer groups form village banks and join subcounty SACCOs
- Links with private millers and traders established to address problems of seed supply and marketing
- General publicity activities undertaken to promote the vegetable oil subsector

Essential Oils Subproject

Intended activities (as per MOU): Introduce, screen and field-assess potential cultivars; establish standard analytical services; collaborate with the private sector to distil essential oils for analysis; participate in seed/seedling production in collaboration with the private sector; disseminate new technologies to staff and farmers through training workshops and demonstrations.

Results:

- Citronella and lemongrass: cultivars successfully introduced, screened and multiplied; on-station mother gardens established; two distilleries built and one more under construction; 784 farmers trained, 197 acres of citronella currently in production in Tororo, Pallisa and Lira; local and international market research carried out; 2,368 litres of citronella sold for value of about US\$16 million. The crop has become the main source of income to 52% farmers.
- Shea nut: 171 farmers in Lira and Katakwi were sensitised on shea nut growing, propagation and conservation. 5,000 seedlings were established at a mother garden in Lira, but this was abandoned because of unrest in the area from 2003. Ten farmers are now growing shea nut and have started their own nurseries.
- *Prunus Africana*: seed collected and 4,000 seedlings of raised and planted by 40 farmers; bark collected for analysis of chemical compounds; some plants destroyed by drought and/or termites; activities discontinued because of low production potential
- Geranium: an acceptable variety identified and tested in on-farm trials; distillation facility constructed on a host farm. Production halted because of problems of disease on trial sites and reluctance of host farmer to proceed with outgrower scheme.

Poverty Status of VODP Beneficiaries, all Subprojects

Poverty Status of Traditional Oilseed Farmers in 1999

1. The baseline survey shows that, in 1999, the oilseed farmers were very poor: 84 per cent of them had grass-thatched houses, most of them with mud walls. Only 14 per cent had permanent roofs and 31 per cent had permanent walls. One third of all farmers had no means of transport at all and the remainder only had bicycles. Only 3 per cent had a permanent store for their grain, most of them having the traditional mud granary (62 per cent) or a temporary store (32 per cent). Just over half of them had a radio (51 per cent). Ten percent of the farmers were illiterate and over half (58 per cent) had only primary-level education. The average household size was 6.5 members. On these indicators, all of the districts were poor, although poverty was more extreme in Lira, Soroti and Katakwi. In the last two, the proportion of grass-thatched houses was 92 per cent and 99 per cent, respectively.

2. Landownership is not a particularly good poverty indicator in the project area because of the prevalence of customary/communal land tenure systems and the large amounts of uncultivable land (forests, swamps etc). Landholdings were relatively large compared with other parts of the country (13.5 acres per household)¹ but the amount of cultivated land per household was only 4.7 acres and less than one third of this was dedicated to oilseed crops (1.4 acres per household).² Thirty-six per cent of households were solely dedicated to agriculture and 64 per cent had other sources of income, such as trading, brick-making, blacksmithing, handicrafts and services.

3. In the baseline sample, there was a small proportion of better-off households, as evidenced by their having higher levels of education, houses with permanent roofs, permanent stores for the grain, bicycles and radios.³ Apac and Pallisa had more of these households than the other districts. The better position of such families may have been because some family members worked in the service professions (e.g. teachers, public servants, politicians).

Poverty Status of Traditional Oilseed Farmers in 2006

4. As the IAS did not repeat the socio-economic ranking questions in 2006, it is not possible to compare the poverty status of oilseed farmers directly. The only quantifiable measure of household benefits comes from an IAS question on how respondents used the income generated by oilseed sales and processing. Table 1 below shows the proportion of positive responses on each item by gender.⁴ Only 29 respondents (5 per cent of the sample) did not respond to any of the options, which suggests that the other 95 per cent had realised some positive benefit. The table indicates that most favoured items for allocating the income were school fees, medical care and daily running expenses (food and upkeep), in that order. School fees were the most favoured item (77.9 per cent), food and medical expenses accounted for 71 per cent and home upkeep for 66 per cent. A smaller proportion of responses (31-42 per cent) favoured investment in the farm (livestock, farm implements, other crops, land, etc.). The most important of these was livestock, which reflects the role that animals have in farm investment and the fact that many areas were depleted of livestock as a result of insurgency and

¹ Average of first and second seasons.

² Although there were some differences in the size of landholdings between districts – with Lira, Katakwi and Kumi having the largest – the amount of cultivated land and proportion dedicated to oilseed crops were very similar.

³ About 25 per cent of respondents had some secondary education and 6 per cent some tertiary education. 14 per cent had houses with permanent roofs.

⁴ This is a multiple response question – it does not show the proportion of total household expenditure allocated to each item. The items are not mutually exclusive; respondents could reply positively to any of the items.

cattle rustling. House construction – which is so visibly striking when travelling round the area – was only mentioned by about a quarter of respondents, which may indicate that it is only undertaken gradually after a period of sunflower growing. Interestingly, the pattern of responses did not vary much between men and women – the main exceptions being other income-generating activities and savings, which were more favoured by women than men.

Appendix 5 - Table 1. Uses of the Income from Oilseed Growing (2006) (multiple responses)

Expenditure Item	% of Respondents Answering Yes on This Item			
	Men	Women	Total	N ^o
Home				
Food	71.3	70.8	71.1	438
Home upkeep	64.5	68.7	66.1	407
Home equipment	33.4	36.5	34.6	213
House construction	23.5	26.6	24.7	152
Bicycle	20.4	21.0	20.6	127
Human Capital				
School fees	78.3	77.3	77.9	480
Medical expenses	71.5	69.5	70.8	436
Farm				
Livestock	45.2	38.2	42.5	262
Farm implements	34.2	34.3	34.3	211
Other crops	28.5	36.9	31.7	195
Other oil crop inputs	33.2	27.9	31.2	192
Land	23.2	23.6	23.4	144
Ox plough	19.1	16.3	18.0	111
Other income-generating activities	23.0	32.2	26.5	163
Savings	22.5	28.8	24.8	153
(Total)	(383)	(233)		(616)

Source: Mission calculations from IAS raw data

Poverty Status of Oil Palm Farmers in 2006

5. A baseline survey of 1,049 rural household heads (62 per cent men, 38 per cent women) in 43 villages was carried out in May 2006 (before KOPGT started to mobilize smallholders to grow oil palm). The sample shows similar characteristics to the oilseeds baseline survey of 1999: there was a similar age distribution, level of education and standard of housing. Twelve per cent of the sample were illiterate and 60 per cent had only primary level education; only 27 per cent had permanent housing structures; 34 per cent had bicycles, but 89 per cent had radios.

6. Most of the sample respondents were subsistence farmers with limited experience of farmer organization or agricultural extension services. The main cash crop, coffee, had declined because of coffee wilt. Many of the men participated in fishing, leaving the women to tend the fields. Crop farming was the primary occupation of 47 per cent of household heads, followed by fishing (16 per cent) and livestock rearing (13 per cent); other occupations included timber felling, charcoal burning, petty trade, public service and labouring. Although 99 per cent of them had access to land, most (78 per cent) were *Kibanja* squatters. The rest were *mailo* or customary owners (8 per cent and 9 per cent, respectively), or were renting land (5 per cent). The vast majority (78 per cent) had less than 3 acres of land, 11 per cent had between 3 and 5 acres and 11 per cent had more than 5 acres. Three quarters of the land was used for crops, one third for animals and only 3 per cent for tree planting. Only 35 per cent had access to extension services and 9 per cent belonged to a farming group. Most households produced food mainly for home consumption with very little surplus for marketing, and 51 per cent of households faced food shortages from time to time.

7. It is possible that a small number of project beneficiaries are considerably better-off than what this implies. All the villages visited by the mission had a small number of landowners with large amounts of land (e.g. above 50 acres). These would include people living in Kalangala town or on the

mainland, and who have provided land to grow oil palm through the outgrower scheme. On the whole, the outgrowers tended to have more land than smallholders.⁵

Poverty status of citronella and lemongrass growers in 2007

8. A survey of 94 farmers in nine sub-countries was undertaken in 2007 in order to assess the impact of citronella and lemongrass on food security. The data showed that most of them owned their land and only 2 per cent rented.⁶ Average landholdings per farmer were larger than in other subproject areas (12.9 acres) and there were large differences among farmers from different districts; for example, farmers from Mulanda had an average of 28.8 acres each compared with those from Nagongera with 6.5 acres.

9. Crop farming was the main occupation for 81 per cent of respondents and a small number were cattle farmers (in Nabuyoga and Mulanda subcounties). Six per cent were salaried employees, and the other 10 per cent were engaged in brick-making, brewing, trading or casual labour. The level of education was higher than that of the traditional oilseed farmers living in the same region: 46 per cent had primary education or were illiterate compared with 68 per cent of traditional oilseed farmers and 72 per cent of oil palm farmers.

10. Most of the essential oil crops cultivated were citronella; only 26 per cent were lemongrass. The proportion of land allocated to the essential oil crops was relatively small (11 per cent to citronella and 5 per cent to lemongrass), compared with food crops (30 per cent) and livestock (47 per cent). However, the latter figures are distorted by the cattle farmers in two subcounties. Without these two subcounties, the proportion of land allocated to food crops rises to 42 per cent while livestock falls to 23 per cent. The proportion of land allocated to essential oil crops is the same. No major food security problems were mentioned.

11. The study reported that 67 per cent of the farmers recorded major improvements in household income and 30 per cent recorded minor improvements. Income from citronella was now the major source of household income for 53 per cent of the farmers. There were few responses to questions on how this income was used.

Socio-economic Rankings of Sunflower and Citronella Farmers in 2009

12. The mission PRA analysis shows that the key criteria of socio-economic ranking in the sunflower and citronella farming communities were land, livestock, living standards, number of meals per day, modes of transport, numbers of children, and access to good-quality education and medical services. It revealed substantial differences in these variables within the communities, with a small number of families at the extremes of very well-off or very poor and landless. The extent of this variation differed between districts, being more marked in Tororo, Mbale, Apac and Masindi, and less so in Soroti and Lira. The proportion of farmers identified as 'poor' varied from 10 per cent in Tororo to 70 per cent in Soroti; Mbale and Masindi had 38-39 per cent in this category, Apac had 30 per cent and the two subcounties in Lira had 20-25 per cent. The proportions of 'very poor' – usually landless families – also varied, with Tororo, Apac and Masindi having 17-20 per cent, Soroti 10 per cent and Mbale and Lira having virtually no families in this category. The following tables provide some examples of these rankings, selected to illustrate the differences noted above. The full PRA report is available as an annex to this evaluation. It should be noted that citronella or sunflower growing was undertaken by all the different socio-economic groups.

⁵ The mission met one local leader who was growing 44 acres of oil palm.

⁶ The report does not mention the type of landownership, but most of the citronella growers live in areas where communal ownership is the dominant form of land tenure.

**Appendix 5 - Table 2. Socio-economic Rankings of Citronella Farmers in Tororo
(Nagongera subcounty)**

Criteria	Very Well-off	Well-off	Poor	Very Poor
Rankings	They have over 200 acres of land, 20+ head of cattle. Large permanent house with tiled roof; cars; four good meals a day; children attend good schools to university level; get good medical services	10-20 acres of land. Medium brick iron-roofed house; 2-3 cows plus sheep and goats; most with bicycles and few motorcycles; majority educate children up to A-level. Family has three meals a day; uses government hospitals	Often have 1 acre of land; all live in huts; have a few sheep, goats and chickens; no transport means; children attend UPE; family has two unbalanced meals a day. Rarely go to hospital, often use herbs	Rent single rooms; have small plots; with or without chickens; not educated; poor meals; often survive by offering labour
% of farmers in group	2%	70%	10%	18%
Land planted with citronella	Large areas of pasture, citronella planting could not be specified	Citronella was represented by seven leaves, being the largest acreage for many farmers in this category	¼ acre of land under citronella	No acreage for citronella growing

**Appendix 5 - Table 3. Socio-economic Rankings in Soroti
(Tubur subcounty)**

Criteria	Well-off	Poor	Very Poor
Rankings	They have 5-10 acres of land; over 4 bulls, 2-10 cows, 10-20 local chickens; big houses with thick, well-thatched houses with big poles. A few have started to have permanent iron roofs. They have 5-10 children, some with extended families, and attending UPE, USE and some to tertiary institutions. They have three meals a day and attend both private clinics and govt health centres	On average they have 3-5 acres of land, 2 bulls, 1-2 cows, 2-5 goats and 5-10 chicken. Most have 3-7 children; moderate-sized grass-thatched houses; the majority educate in UPE, some to USE schools and a few go to private schools. Families have 2-3 meals a day (balanced during harvest seasons); they tend to use private clinics and government health centres.	1-3 acres of land; some with 1-2 bulls, others none, one cow, 2-5 goats and 1-5 chicken. All have small round grass-thatched houses with 8-20 children including orphans. Often have one or two meals a day. Children go to UPE schools and use of the health centre services
% farmers	20%	70%	10%
Land planted with sunflower	On average, 4 acres 1 st season; and 2 acres 2 nd season	1 st season 1 acre; 2 nd season 2½ acres	1 st season ½ acre; 2 nd season 1½ acres

**Appendix 5 - Table 4. Socio-economic Rankings in Lira
(Amuca parish)**

Criteria	Well-off	Medium	Average	Poor
Rankings	5-10 acres of land with 10-15 cows, 10 goats, 50 chickens. Permanent houses, some cars, others with motorcycles and able to educate children up to university level. They have three meals a day	Own 3-4 acres with 10 goats and many chickens. Some have small semi-permanent houses while others are of mud and wattle with grass thatch. Some own bicycles even for <i>boda boda</i> bike taxis; 4-12 children who go to UPE schools. 2 meals /day and go to govt. health facilities. Good household items.	Own 1-2 acres, They have small huts/mud and wattle houses with old iron sheets. A few have bicycles; many children; attend UPE schools. Two meals/day	The landless rent 1-2 acres for cultivation at UGX 35,000/=. These are often teachers and the like in Lira or migrants or are from IDP camps. They rent small rooms in trading centres; can only afford one meal per day.
Av. % of farmers in category	15%	50%	20%	5%
Land planted with sunflower	4 acres in 1 st season; 3 acres in 2 nd season	1 acre 1 st season; 1½ acres 2 nd season:	½ acre in both seasons	½ acre in both seasons

**Appendix 5 - Table 5. Socio-economic Rankings in Apac
(Abongomola subcounty)**

Criteria	Well-off	Medium	Average	Poor	Very Poor
Rankings	They have 50 – 60 acres of land. Own permanent iron-roofed houses and neat rest houses of grass thatch; bicycles and motorbikes. 2-4 children often up to tertiary institutions of learning. Can afford 3-4 meals a day; attend private clinics and health centres.	May have 20-49 acres of land. Some own permanent houses with iron sheets while others use mud bricks. They own bicycles. 8-10 children; attend UPE and USE. They have 3 meals a day. When sick they attend clinics and health centres.	Often have 15 - 19 acres. Some have semi-permanent houses with iron sheets and others have huge grass thatched houses. 8-10 children in UPE; two meals/day; use health centres for medical care.	Most with 7-14 acres of land. Permanent houses with mud bricks, some of which are grass-thatched. Some own bicycles and send the 5-14 children to UPE and USE schools. Eat two meals/day and attend clinics and health centres.	Have 4-6 acres of land. Grass-thatched round huts; a bicycle, and around 7 children who attend UPE. Two meals a day. When sick they only attend public health centres.
Av. % of farmers in category	10%	20%	20%	30%	20%
Land planted with sunflower	1 st season, 20 acres; 2 nd season, 25 acres	Depending on the season, 2-5 acres in 1 st season and 5-10 acres in 2 nd season	2-3 acres of sunflower in 1 st season and 3 acres in 2 nd season	1 acre of sunflower per season	1 acre of sunflower per season

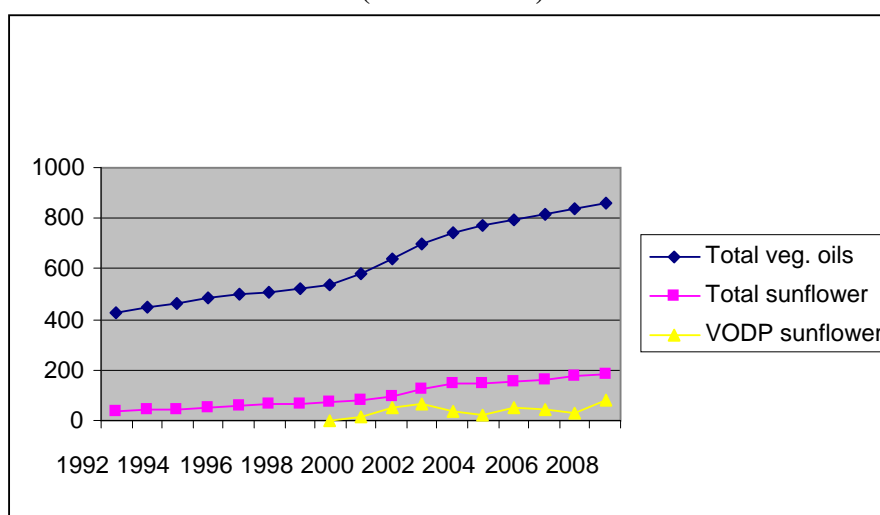
Goal-level Impacts

1. This appendix looks at the project's contribution to its broader goals, namely, national production of vegetable oil crops (sunflower in particular); domestic vegetable oil consumption; import substitution of vegetable oils; and rural poverty reduction. Since there are many influences on these aggregate processes besides that of the VODP, it is not possible to attribute any changes to the project alone. The point is to examine the broader trends to which the project contributes.

2. **Contribution to vegetable oil crop and sunflower production.** MAAIF has collected data on the area planted to vegetable oil crops since 1980 and to sunflower since 1992. Figure 1 gives the trends since 1992 in the area planted with all vegetable oil crops, all sunflower crops and the sunflower plantings supported by VODP. The years between 1992 and 1998 are included in order to demonstrate that production in the subsector was already growing prior to project start-up. However, the rate of expansion accelerated after 1998. Between 1999 and 2008, the total vegetable oilseed area grew by 60 per cent (from 538,000 to 861,000 ha), sunflower acreage grew by 154 per cent (from 72,000 to 183,000) and the VODP-supported sunflower acreage grew by 4,000 per cent (from a small start of 2,000 ha to 82,000 ha). It should be noted that sunflower is still only a small proportion of total oilseed acreage (21 per cent in 2008), but VODP-supported planting represented a significant amount of it (45 per cent of total sunflower area in that year).

3. Figure 2 gives more detailed information on sunflower production, where the rapid growth since 2000 can be seen; VODP's contribution matches this trend in the early years and again in 2008, but is more erratic in the intervening years because of the security situation and drought already discussed. However, VODP may have contributed indirectly to the larger trend as the initial expansion prompted an increase in seed sales and milling, which in turn stimulated further expansion in sunflower cultivation beyond the VODP-supported groups.¹

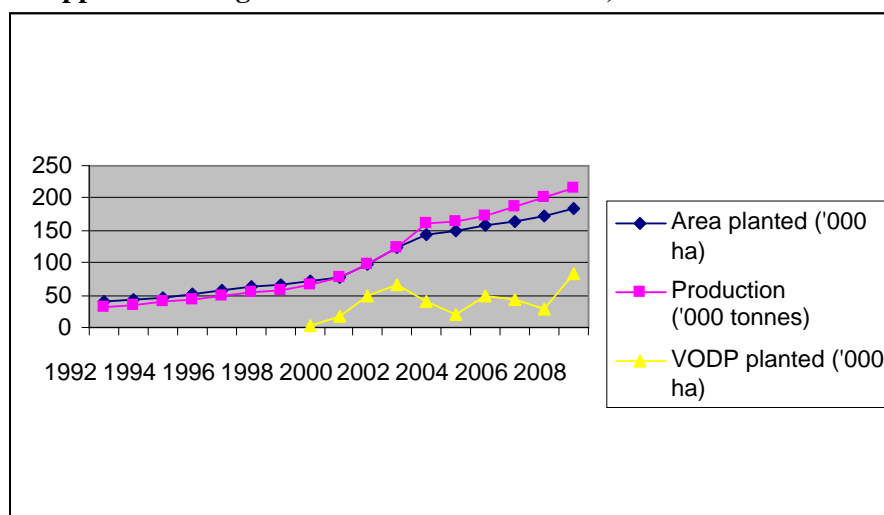
Appendix 6 - Figure 1. Area Planted with Vegetable Oils and Sunflower ('000 hectares)



Source: MAAIF and VODP data.

¹ These broader effects were reiterated on numerous occasions during mission meetings, but it has not been possible to quantify them.

Appendix 6 - Figure 2. Sunflower Production, National and VODP



Source: MAAIF and VODP data.

4. **Consumption of vegetable oil.** The Uganda national household surveys provide information on household consumption of cooking oil for 1999/2000, 2002/2003 and 2005/2006.² Data were extracted for all Uganda, all rural areas and for the 14 'VODP districts' (standardized according to the district definitions in 1999/2000). Table 1 shows that the quantity of cooking oil consumed in the three survey rounds increased at all levels: nationally, in the total rural population and in the VODP districts. This was partly because of population increase. However, the percentage of households consuming cooking oil was also increasing, as was the average oil consumption per household.³ It is to be noted that average household oil consumption was higher in the VODP districts and it grew faster than among the average rural population. Unfortunately, no national-level nutrition data exist that would enable the nutritional benefits of the increased oil consumption to be measured.

Appendix 6 - Table 1. Trends and Patterns of Cooking Oil Consumption, 1999/2000-2005/2006

	Uganda	All Rural	VODP Districts (rural)
Quantity (ltr) consumed in last seven days			
1999/2000	835,512	594,871	177,991
2002/2003	993,989	737,846	226,445
2005/2006	1,081,510	782,028	234,317
Estimated number of households			
1999/2000	4,105,800	3,459,719	788,627
2002/2003	4,631,921	3,844,263	861,780
2005/2006	4,801,945	3,957,596	853,287
% households consuming cooking oil			
1999/2000	50.4	45.8	55.7
2002/2003	55.1	52.1	62.9
2005/2006	56.6	53.9	70.6
Quantity (ltr) per household			
1999/2000	0.20	0.17	0.23
2002/2003	0.21	0.19	0.26
2005/2006	0.23	0.20	0.27

Source: EPRC calculations based on UNHS I, II, III rounds

Note: All figures exclude districts in the Acholi subregion (Gulu, Kitgum and Pader), which were not covered in 1999/2000. The VODP districts exclude the urban population. The number of households declines in 2005/2006 because of a change in the sampling methodology.

² The household surveys capture consumption of food and beverages (including cooking oil) during the past seven days prior to the interview. Household-specific units of measurement are converted into litres.

³ The changes are small because they are averaged over a large number of households – they would be greater at the local level, particularly in the sunflower growing areas.

5. **Import substitution.** It proved extremely difficult to assess the degree of import substitution of vegetable oils. Unfortunately the project does not systematically collect data on national production and consumption of vegetable oil, or on imports and exports of the product. The only evidence available to the mission came from the IAS, which shows that national demand doubled between 1999 and 2005, particularly during 2004 and 2005. The proportion covered by domestic production rose from 35 per cent to 40 per cent during 1999 and 2000, then fell to 26 per cent between 2000 and 2003 (as a result of the insecurity) and rose thereafter to 46 per cent by 2005.⁴ This suggests that there was an import substitution effect in those two periods, although Uganda was still dependent on imports for over half of its consumption of vegetable oil in 2005. However, it has not been possible to confirm these trends.

6. Data from MAAIF on vegetable oil imports (by volume - kgs) show that while the composition of vegetable oil imports is very diverse, it is dominated by palm oil imports (as much as 70-80 per cent in some years). In contrast, sunflower oil imports are negligible (less than 1 per cent of imports). The main import substitution effect would therefore come from the oil palm subproject, which has hardly got going yet. On the contrary, the establishment of the BIDCO refinery at Jinja is currently running on imports of crude palm oil, and could thus have contributed to an increase in imports of this product over the last three years. However, there are considerable fluctuations in the levels of imports and a separate analysis would be required to analyse what has been going on.

7. **Poverty reduction.** Poverty data were extracted from the national household surveys of 1999/2000, 2002/2003 and 2005/2006 for the national population, the total rural population and the VODP districts.⁵ Table 2 below shows that poverty was higher in the VODP districts than in all rural areas in terms of both the headcount⁶ and average adult consumption expenditure.

Appendix 6 - Table 2. Poverty Estimates for VODP Districts

	All Uganda	All Rural	VODP Districts (rural)
% households in poverty (headcount)			
1999/2000	28.4	32.3	39.1
2002/2003	32.3	37.1	45.4
2005/2006	22.5	25.6	41.6
Average adult consumption expenditure			
1999/2000	41,323	33,236	29,111
2002/2003	43,260	33,351	27,837
2005/2006	49,058	40,355	28,848
% of all rural households			
1999/2000		100.0	15.6
2002/2003		100.0	22.4
2005/2006		100.0	21.6
Estimated number of households			
1999/2000	4,105,800	3,459,719	788,627
2002/2003	4,631,921	3,844,263	861,780
2005/2006	4,801,945	3,957,596	853,287

Source: EPRC calculations based on UNHS I, II, III rounds

Note: All figures exclude districts in the Acholi subregion (Gulu, Kitgum and Pader), which were not covered in 1999/2000 due to insurgency at the time of the survey. The VODP districts exclude the urban population. The number of households declines in 2005/2006 because of a change in the sampling methodology.

⁴ IAS, p. 31, drawing on data from UOSPA.

⁵ Data were also disaggregated for pilot and expansion districts and for the separate districts, but the results were not reliable because of the small numbers involved.

⁶ The headcount is the proportion of households below the national poverty line.

8. At the national level, poverty rose slightly in 2002/2003 but fell substantially in 2005/2006.⁷ This was also reflected in the rural figures. The VODP districts exhibited a similar trend, although poverty rose more during 2002/2003 and declined less in the subsequent period, possibly because of the ongoing effects of insecurity and bad weather. Therefore the poverty headcount in the VODP districts was actually higher in 2005/2006 than in 1999/2000, in contrast to national trends. Thus it would appear that the significant improvements in livelihoods realised in the sunflower-growing areas had a limited impact on the broader poverty situation in the region. Of course, poverty might have been even higher without the project.

9. In order to investigate non-monetary aspects of poverty, data were extracted from the household surveys on a selection of indicators that had proved to be strongly associated with consumption poverty. These were: material of house construction (whether or not the walls and roofs were permanent), action taken when running out of salt (whether borrowed rather than bought) and possession of a bicycle and a radio. The data show significant improvements in these indicators during the three survey rounds. For instance, in the VODP districts, the proportion of households borrowing or going without salt reduced from 62.5 per cent in 1999/2000 to 36.5 per cent in 2005/2006. The proportion of households with permanent (baked brick) walls rose from 52.9 per cent to 58.4 per cent in the same period and the proportion with permanent roofs rose from 26.2 per cent to 32.5 per cent. The percentage owning bicycles rose from 46.3 per cent to 48.7 per cent. However, despite these improvements, the VODP districts remained poorer than the rural average.

Appendix 6 - Table 3. Selected Non-monetary Poverty Indicators

	Action taken when running out of salt			Housing: use of permanent material		Consumer Durables	
	Borrowed	Bought	Without	Wall	Roof	Bicycle	Radio
1999/2000							
Uganda	33.9	60.2	5.9	41.5	58.0	40.8	52.6
Rural	37.0	56.4	6.6	34.9	51.8	44.4	48.0
VODP districts	51.1	44.2	4.6	52.9	26.2	46.3	37.8
2002/2003							
Uganda	28.5	67.4	4.1	50.6	66.4	42.7	63.3
Rural	31.7	63.8	4.6	44.4	60.6	47.2	61.3
VODP districts	44.6	52.7	2.7	59.9	35.1	49.0	50.6
2005/2006							
Uganda	29.6	68.0	2.5	52.2	64.4	39.2	
Rural	31.8	65.4	2.8	46.2	59.3	43.6	
VODP districts	33.9	63.4	2.6	58.4	32.5	48.7	

Source: EPRC calculations based on UNHS I, II, III rounds

Note: All figures exclude districts in the Acholi subregion (Gulu and Kitgum), which were not covered in 1999/2000. The VODP districts exclude the urban population. The number of households declines in 2005/2006 because of a change in the sampling methodology. No information collected on radios in 2005/2006.

10. In summary, poverty in the VODP districts was more marked compared with that of the rural population in general, and it actually increased between 1999/2000 and 2005/2006. On the other hand, performance in terms of non-monetary poverty indicators showed improvements over the period. The latter data are more consistent with the changes manifested by VODP beneficiaries. The project's direct contribution to poverty reduction in rural areas would probably be more marked in the sunflower-growing communities. It would also have made an indirect contribution to urban employment expansion associated with the new milling and trading opportunities in the towns.

⁷ The rise in poverty between 1999/2000 and 2002/2003 is thought to be mainly due to a change in census methodology.

Profitability and Value-Chain Efficiency

1. An analysis of production costs, revenue and margins on a standard unit basis⁸ indicates that citronella and sunflower crops are profitable. The systematic year-on-year increase in the acreage of these crops (especially for sunflower) and the gradual abandonment of the conventional cash crop (cotton) in the two subproject areas is a clear reflection of better profits being realised by the smallholder farmers. Though some previous project reports indicated that sunflower production without value addition by the farmers was not profitable,⁹ the mission established that, at the current average yield and prices, the activity is profitable (with or without farmers' own milling).

Citronella

2. The high establishment costs substantially erode profitability during the first year of production, in which case the activity realises a nominal annual margin of 19 per cent. However, subsequently, the crop is very profitable with an annual return of 218 per cent because of the extremely low incremental costs involved (table 1). Nonetheless, it is important to note that the profitability of this new crop depends on the availability and sustainability of the market and on minimizing the cost of transport of the raw material to the distilleries. Although sales of citronella have been achieved, the market is still uncertain. Smallholders who are growing the crop far from the distilleries are incurring high transport costs and are not realising enough returns to encourage them to expand their field activities. The profitability of citronella is also constrained by the capacity and reliability of the existing distilleries, which is becoming inadequate. This situation is not helped by intermittent shortages of water and likely future shortages of fuelwood for the distilling process. If these remain critical, farmers' enthusiasm for growing and maintaining the crop will definitely be eroded.

Appendix 7 - Table 1. Profitability Analysis for Citronella Production - Tororo (Ush)

Activity	Per Acre per Year - New Establishment	Per Acre per Year - Established Fields
Average yield (Kg) – Grass	2,500	4,000
Citronella oil (out-turn - litres)	25	40
Price to farmer (Citronella oil per litre)	15,000	15,000
COSTS		
Bush clearing	20,000	-
1st ploughing (oxen)	40,000	-
2nd ploughing (oxen)	40,000	-
Planting	10,000	-
Weeding (twice)	40,000	40,000
Harvesting	90,000	120,000
Transport to distillery	75,000	120,000
Total field/production costs	315,000	188,900
Revenue from sale of oil	375,000	600,000
Gross Margin	60,000	411,100
COP (per litre)	12,600	4,723
% Margin	19%	218%

Source: mission discussions with farmer groups

⁸ The analyses of profitability for the traditional oil seeds component are based on 1 acre for ease of understanding. Analysis of performance below or above 1 acre can be done by the respective proportional extrapolation of the one acre data.

⁹ For example *Value Chain Development and Extension Modalities in the Traditional Oilseeds Subsector*, report to IFAD by Claire Bishop-Sambrook and Markus Rosenberger, May 2008.

Sunflower

3. Smallholder production and processing of sunflower is generating positive returns (table 2). This has been enhanced by high competition among the numerous buyers and millers, the favourable price trend from the historical average of UGX 300-600/kg, and fact that the farmers can successfully grow the crop two seasons a year. The farmers are realising very good margins on sales of both sunflower grain and milled products (cooking oil and cake), in addition to profits from complementary enterprises such as bee-keeping, poultry, fish and pig-breeding.

4. Farmers have confirmed that the profit on sunflower production and milling exceeds the margins realised on other crops traditionally grown in the area, such as cotton, maize, sorghum, beans and groundnut. Growers who are adding value to their produce are realising about double the profit margins through sales of vegetable oil and cake compared to those selling the raw seeds. However, realization of higher levels of profit at the farm level is still largely constrained by high unit costs of production arising from manual technologies, low productivity and yields, and poor produce quality. The average cost of production per kilogram of sunflower realised by VODP-supported farmers is higher than that of other programmes.¹⁰ Comparatively, farmers growing hybrid sunflower are realising higher profits than those growing 'Sunfola' under the same soil nutrient regime.

5. Although efficiencies in the sunflower value chain have improved during the project period, not least because of the increased output from farmers, a number of weaknesses remain that have direct implications for farmers' profitability and production levels. Value-chain weaknesses, risks and potential mitigation measures are discussed below and summarized in table 3.

Value-chain Weaknesses

6. **Seed supply and quality.** Despite the increase in seed multiplication and distribution through the project, the market for seed is poorly integrated. Both local seed supplies and imports are unreliable. Moreover, the quality of OPV seed deteriorates over time because of cross-pollination and disease, so there is a need for sustained effort by the research stations to improve the quality of the seed and for continuous scrutiny by seed certification agencies. The project should have limited the distribution of free seed to its beneficiaries or at least innovated a system that enabled the participation of private dealers and stockists, such as by using vouchers. Farmers who adopted the hybrid sunflower promoted by Mukwano showed that they have the capacity and willingness to buy seed once it is available and accessible. The cost of seed is small, particularly the 'Sunfola' which requires only 2 kg per acre, compared with the cost of other field activities and would not present a major financial constraint to the farmers. There is a need now to strengthen the integration of private inputs dealers and seed companies, so that a private-sector, market-led input supply mechanism can operate smoothly.

7. **Soil fertility.** Although the sunflower crop is currently profitable, the realised yield levels are averaging only about 50 per cent of the yield potential of the seed varieties being grown on research stations. The major issue is the chronic under-use of fertilizer. The research institutes need to be more actively engaged in addressing low soil fertility, and efforts are needed to improve availability and accessibility of fertilizer at the field level (for example by including fertilizer in the demonstration package). A cost-benefit analysis would help the extension staff to demystify the assertion by the farmers that the fertilizer is very expensive and thus its application is not profitable. A clear dissemination of the benefits of fertilizer use, in terms of realizable marginal returns, is necessary.

8. **Low productivity.** Shortages of labour, limited scope for increasing efficiency by using ox ploughs and low levels of mechanization are constraining the prospects for acreage expansion of smallholder farmers and are impacting on yields because of delayed accomplishment of manual field activities.

¹⁰ The recently concluded USAID-funded APEP project has a unit cost of production of UGX 228/kg for sunflower, which is quite below the lowest cost of production given in annex 2.

9. **Cottage processing.** Growers who are adding value to their produce are realising about double the profit margins through sales of vegetable oil and cake (both of which have a good market) compared to those selling the raw seeds. However, the capacity of the Ram press technology is inadequate for the increased production levels currently being realised in the project areas. Indeed many farmers, especially in the Lira area where production volumes have substantially increased, have abandoned the use of Ram presses. Access to motorized mills that allow scaling up from the Ram presses is needed, supported with appropriate financial mechanisms (for example, collaborating with institutions that support micro leasing for agriculture).

10. **Post-harvest handling.** All millers complain about the poor quality of the harvested grain (high moisture and foreign matter content). This is resulting in high milling costs owing to depreciation of machinery, more frequent maintenance, high milling losses, rejected deliveries of sunflower from farmers by millers, and low prices paid to the farmers by middlemen and millers. The major problems here are the limited availability of quality-enhancing equipment and materials, such as dryers, sieves and tarpaulins, the lack of adequate storage facilities, and the behaviour of middlemen who mix good and bad grains together either in the process of consolidating the produce or intentionally covering up the bad-quality grain.

11. **Marketing.** The market for sunflower exists, and is stable and growing, as manifested in the exponential growth in the milling facilities in the project area, especially in Lira.¹¹ All the mills are operating below their installed capacity, which indicates an underutilized market potential. In addition to local millers, there are active buyers for Kenya-based millers. However, while the market for sunflower is good, its impact on the farmers depends on the efficiency of the marketing system. There is limited collective bulking and marketing of the sunflower crop by farmers, which could increase their bargaining power, enhance the quality of the produce marketed, and realise better prices for it.¹² There are large variations in opportunities for the marketing of the sunflower by-product, oil cake. In areas where enterprises such as poultry, pig-breeding and fish-farming flourish alongside sunflower production, the market is good and sellers are realising sustainable profits. But in areas where such enterprises are not thriving, the market for oil cake appears to be very unreliable. Again, bulking and collective marketing of the oil cake would be beneficial as the larger buyers prefer large volumes in order to realise economies of scale in transport and processing. Mukwano Industries, for example, has had no problems marketing its oil cake because of its capacity to provide large volumes to Kenyan feeds processors.

12. **Savings and credit.** Although this activity was not originally envisioned at the project design stage, its importance in the subsector cannot now be ignored. The farmers' savings and credit activities, where functioning, are providing accessible financial services to the farmers who would not otherwise be served by formal financial institutions. Given the growing level of financial injections into the farming communities in terms of the sunflower purchases by buyers and millers,¹³ there are ample opportunities for increasing farmers' savings capacity. However, in the case of smallholder farmers, the financial products currently provided by microfinance institutions are very expensive (minimum interest rate of 3 per cent per month and other charges), extremely short-term and have poorly structured repayment scheduling that requires repayment shortly after the loans have been accessed. Thus these products do not meet the needs and priorities of smallholder borrowers.

13. **Milling.** The mission was unable to obtain comprehensive milling cost data to warrant a meaningful profitability analysis. However, given the robust competition at this transaction point, it is clear that the millers are realising sustainable profits. The more-than-doubled price of cooking oil over the last two years ought to have provided a comfortable cushion for higher miller profit. However,

¹¹ The number of oil mills in Lira alone has grown from three in 1998 to the present 26.

¹² In a few cases where farmers' marketing associations exist and function well, the farmers are already getting better prices.

¹³ For example in 2008-B season, Mukwano bought sunflower worth UGX 15.5 billion. Also, Guru Nanak purchases sunflower worth UGX 40–60 million every day during the peak marketing period.

millers cited the inability to access working capital from financial institutions as a major obstacle to realising their milling potential. There is demonstrated, bankable capacity for short-term working capital requirements but what is lacking is adequate credit intermediation support. Insufficient working capital is limiting millers' capacity to hold enough stocks to ensure continuous milling, thus leading to under-utilization of capacity. If bulking centres and milling facilities were able to marshal finance for paying for deliveries on a cash basis, the volumes moved would substantially increase.

Appendix 7 - Table 2. Profitability Analysis for Sunflower Farmers - 2008b Season* (Ush).

Activity	Busiu Farmers (Mbale)	Busiu Farmers (Mbale)**	Obadmuni Farmer Group (Lira)	Amuca Farmer Group (Lira)	Abongomola (Apac)	Lworo Farmer Group (Masindi)	Lworo Farmer Group (Masindi)**	Mpumwe Farmer Group (Masindi)	Mpumwe Farmer Group (Masindi)**
Average yield per acre (kg)	500	500	650	612	500	750	750	720	720
Farm gate price per kg - grain	500	500	500	550	550	500	500	500	500
Mill gate price (oil)		5,000					4,400		4,000
COSTS:									
Land preparation									
Bush clearing/slashing	10,000	10,000	40,000					10,000	10,000
1st ploughing	30,000	30,000	40,000	60,000	40,000	40,000	40,000	40,000	40,000
2nd ploughing	30,000	30,000		60,000	40,000			40,000	40,000
Seed (2 kg)									
Hybrid pan 7351 (2 kg)			21,000	21,000	21,000	21,000	21,000		
'Sunfola'	6,400	6,400						-	-
Planting									
Planting without fertilizer	20,000	20,000	15,000	20,000	15,000	30,000	30,000	20,000	20,000
Planting with DAP fertilizer			-	-	-	-	-	-	-
Fertilizer									
DAP			-	-	-	-	-	-	-
Urea			-	-	-	-	-	-	-
Urea application – labour			-	-	-	-	-	-	-
Weeding									
1 st	25,000	25,000	40,000	30,000	40,000	40,000	40,000	35,000	35,000
2 nd				30,000	40,000	40,000	40,000		
Birding scaring									
Bird scaring	20,000	20,000						15,000	15,000
Harvesting									
Harvesting & threshing	10,000	10,000	15,000	15,000	12,000	40,000	40,000	12,000	12,000
Drying and cleaning	30,000	30,000	-	-	-				
Bagging materials	7,500	7,500	-	-	-				
Transport from field					5,000	20,000	20,000		
Total field/production costs	188,900	188,900	171,000	236,000	213,000	231,000	231,000	172,000	172,000

Appendix 7 - Table 2. (continued) Profitability Analysis for Sunflower Farmers - 2008b Season* (Ush).

Activity	Busiu Farmers (Mbale)	Busiu Farmers (Mbale)**	Obadmuni Farmer Group (Lira)	Amuca Farmer Group (Lira)	Abongomola (Apac)	Lworo Farmer Group (Masindi)	Lworo Farmer Group (Masindi)**	Mpumwe Farmer Group (Masindi)	Mpumwe Farmer Group (Masindi)**
Farmers' own milling									
Transport to mill									
Milling charges		100,000					27,500		28,800
Milling labour charge							0		57,600
Sub-total (milling costs)	0	100,000		0	0	0	27,500	0	86,400
Total production/milling costs	188,900	288,900	171,000	236,000	213,000	231,000	258,500	172,000	258,400
Milling outturn (litres)		100					125		180
Cake realised		250					375		360
Income sale of grain/oil	250,000	500,000	325,000	336,600	275,000	375,000	550,000	360,000	720,000
Income sale of oil cake	-	125,000	-	-	-	-	75,000	-	72,000
Total revenue	250,000	625,000	325,000	336,600	275,000	375,000	625,000	360,000	792,000
Gross margin	61,100	336,100	154,000	100,600	62,000	144,000	366,500	188,000	533,600
COP (per kg)	378	578	263	386	426	308	345	239	359
Return to variable costs	1.32	2.16	1.90	1.43	1.29	1.62	2.42	2.09	3.07
% Margin	32%	116%	90%	43%	29%	62%	142%	109%	207%
Tenure (months)	4	4	4	4	4	4	4	4	4
Annualised return	97%	349%	270%	128%	87%	187%	425%	328%	620%

* Analysis excludes the cost of implements and tarpaulins, which are used for multiple crops and activities.

They are treated as overheads to be offset from the realised gross margin. Also, cost of family labour (where applicable) is excluded.

** Farmers milling their sunflower for sale of oil and oil cake.

Source: Mission discussion with farmer groups

Appendix 7 - Table 3. Key Gaps and Risks Identified in the Traditional Oil Seeds Value Chain

Chain Level	Gaps/inefficiencies	Risks	Potential Risk-mitigation
Inputs Supply	Inadequate supplies of sunflower seed	<ul style="list-style-type: none"> • Fewer farmers growing sunflower • More limited acreage realised. 	<ul style="list-style-type: none"> • Integrate support for dealers and stockists. • Collaborate with entities supporting inputs suppliers e.g. UNADA. • Implement time-bound actionable research geared towards availing new varieties and sufficient breeder seed.
	Deteriorating 'Sunfola' seed quality	<ul style="list-style-type: none"> • Lower yields realised and low extraction oil recovery 	<ul style="list-style-type: none"> • Improve inspection/certification of seed grown by contract farmers. • Monitor and improve quality of existing foundation and breeder seed
Production/ Farmers	Low soil fertility	<ul style="list-style-type: none"> • Lower yields realised 	<ul style="list-style-type: none"> • Actively engage research institutes to address low soil fertility. • Include fertilizer in the demonstration package. • Undertake cost-benefit studies of fertilizer use with farmers. • Support efforts to improve availability and accessibility of fertilizer.
	Limited access to more efficient production resources, e.g. ox plough services, tractors	<ul style="list-style-type: none"> • Limited expansion of acreage • Low yield due to delayed field activities 	<ul style="list-style-type: none"> • Financial mechanisms (credit) for more efficient farm field operations.
	Low milling capacity of Ram presses	<ul style="list-style-type: none"> • Farmers not realising maximum profit sales of oil and cake • Stockpiling of unprocessed raw material 	<ul style="list-style-type: none"> • Facilitate access to higher-capacity motorized mills for farmer groups that realise steady and higher production levels.
	Limited finance for expanding production	<ul style="list-style-type: none"> • Limited acreage expansion. • Low input production technology 	<ul style="list-style-type: none"> • Financial mechanisms (credit) for more efficient farm field operations..
Millers / Buyers	Poor post-harvest quality of raw material (sunflower grain)	<ul style="list-style-type: none"> • High milling costs due to higher depreciation of milling machines, more frequent machine maintenance and high milling losses. • Rejected deliveries of farmers' sunflower. • Low prices paid by middlemen and millers. 	<ul style="list-style-type: none"> • Intensify training for farmers in post-harvest handling. • Facilitate access to post-harvesting equipment and materials, e.g. tarpaulins, dryers. • Improve storage facilities
	Insufficient working capital	<ul style="list-style-type: none"> • Raw material stockouts • Under-utilization of milling capacity. 	<ul style="list-style-type: none"> • Financial mechanisms for produce procurement. • Financial mechanisms for storage.

Evaluation Framework

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective I. Assess Project Performance		
I.A. Relevance	<ul style="list-style-type: none"> • <u>Policy alignment</u>: Were project objectives consistent with national agriculture and rural development strategies and policies, the COSOP and concerned IFAD subsector policies? How coherent was it in terms of the fit with the programmes and projects of the Government and other development partners? • <u>Participatory design</u>: Was the project design participatory; did it take into consideration the input and needs expressed by key stakeholders, including the Government, executing agencies, cofinancier (private sector in this case) and the expected beneficiaries and their grass-roots organizations? • <u>Project strategy</u>: Was the approach to developing the vegetable oil subsector appropriate (e.g. value chain, partnership with the private sector)? What were the implications of having two very different components in the project in terms of working with different commodities and in different geographic areas? • <u>Objectives and results chain</u>: Was the linkage between development objectives, intended outcomes and outputs coherent? Were the objectives of the two components (vegetable oils and oil palm) realistic given local agroecological and socio-economic conditions? Have project objectives remained relevant over the period of implementation? In case of significant changes in the project context, or in IFAD policies, have these objectives been retrofitted to the design? • <u>Implications of delay in oil palm component</u>: Did the reappraisal of the oil palm component five years after initial Executive Board approval imply significant changes in project design? Were these changes justified? Were the terms of the agreement with the private sector appropriate? • <u>Learning approach</u>: Has the project benefited from available knowledge (for example, the experience of other similar projects) during its design and implementation? • <u>Targeting</u>: What was the envisaged targeting approach? Did it facilitate access for disadvantaged groups/households/genders? What were the implications for targeting of the project's commodity chain focus? • <u>Incentives and training</u>: Given the lack of capacity at all levels in the oil palm industry (managerial, technical, practical), was sufficient attention given to incentives and training in project design? • <u>Overall project coherence</u>: In general, was the project design appropriate for achieving the project's core objectives (links between outputs and activities, financial allocations, project management, supervision, M&E arrangements)? 	President's Report Loan agreement Formulation report Appraisal report MTR Supervision report Project self-assessment report

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective I. Assess Project Performance		
I.B. Effectiveness (achievement of intermediate outcomes beyond outputs)	<ul style="list-style-type: none"> • <u>Actual achievements and outcomes</u>: To what extent have the expected development objectives been attained in both quantitative and qualitative terms? • <u>Likely achievements and outcomes</u>: Implementation of the oil palm component started only in 2005. How far are its objectives likely to be met within the current time frame (2005-2010) • <u>Internal factors affecting outcomes</u>: What factors in project design and implementation account for the estimated results in terms of project effectiveness? • <u>Role of project risk</u>: Did any of the risks identified at project appraisal affect the achievement of objectives? If yes, could these risks have been better managed? • <u>External factors affecting outcomes</u>: Have there been any major changes in the country context (e.g. policy framework, political situation, institutional set-up, economic shocks, civil unrest, etc.) that affected the effectiveness results? If yes, did IFAD and the Government make the required adjustments to project design and implementation to ensure the achievement of objectives? 	President's Report Loan agreement Supervision reports PCO documentation MTR Direct field observations by evaluation mission Self-assessment
I.C. Efficiency	<ul style="list-style-type: none"> • <u>Project costs</u>: What were the costs of activities and inputs invested to develop specific project outputs (e.g. for traditional vegetable oil development and for smallholder oil palm plantations)? What were the costs to the private-sector partner for development of the nucleus estate and its associated infrastructure?^A • <u>Cost per beneficiary</u>: What was the overall actual cost per beneficiary for oilseeds and oil palm? What were the loan costs per beneficiary at appraisal and evaluation, and how do they compare to similar projects in Uganda and/or elsewhere? • <u>Cost ratios</u>: Is the cost ratio of inputs to outputs comparable to local, national or regional and international benchmarks? (For example, for seed multiplication, compare the cost of inputs to the amount of seed produced.) • <u>Administrative costs</u>: What were the administrative costs per beneficiary and how do they compare with similar projects in Uganda and/or elsewhere? • <u>IERR</u>: If possible, assess the project's IERR • <u>Procurement</u>: What were the principal issues that held up procurement of the private-sector operator for the oil palm component? Did delays in implementation of this component affect benefits or costs in a significant manner? What were the implications of delaying the reallocation of funds to the VODF component until after June 2008? Were there any other significant delays in procurement? • <u>Management efficiency</u>: What are the benefits and limitations of the management structure (e.g. one team but two very different components)? How long did it take for the loan to be effective? 	President's Report Loan agreement Formulation report Appraisal report Supervision reports MTR PCO documentation Interviews with project staff Self-assessment Government data (i.e. for bench marking)

^A Quality of works/supplies needs to be fully and explicitly recognized for such input/output comparisons, including the cost of land clearing, holing planting etc.

CRITERIA	SPECIFIC EVALUATION QUESTIONS / INDICATORS	DATA SOURCES
Evaluation Objective II. Assess Rural Poverty Impact		
II.A. Household income and assets	<ul style="list-style-type: none"> • In the VODF area: To what extent has VODP led to increases in farmer income? Has the composition of household income changed (more or diversified income sources)? • Have farm households' physical assets changed (farmland, water, livestock, trees, equipments such as Ram presses, etc.)? Have other household assets changed (houses, bicycles, radios, telephones, etc.)? • In the oil palm area: It is too soon to discern any impact on household income but there may have been other benefits. Are there any discernable benefits to participating farmers so far (e.g. wage income, land holding)? • To what extent has the project improved the access of rural households to financial services for savings, investment and/or insurance? • Have women benefited as much as men? 	MTR Survey Focus group discussion Individual interviews in the field Direct observation Self-assessment
II.B. Human and social capital, and empowerment	<ul style="list-style-type: none"> • In the VODF area: Did farmers' groups improve access of farmers to market opportunities? Were the farmers provided with skills and knowledge to better participate in market transactions? Did the bargaining power and opportunities of farmers vis-à-vis traders and millers change? • Were rural organizations (farmers' groups, KOPGT) able to represent the interests of farmers in decision - making processes? • To what extent did the project promote the empowerment of local farmers through improved self-help capacities at the community or production unit levels? • Did representation of women in public institutions change (e.g. KOPGT)? Did women benefit from increased influence and control over strategic choices at household, community or production unit level? • To what extent did VODP contribute to increased access of the rural poor to better health? 	Project completion report Focus group discussion Self-assessment Individual interviews in the field
II.C. Food security and agricultural productivity	<ul style="list-style-type: none"> • What is the actual or likely increase in the scale of cash crop production among participating farmers? • Has the project had any impact (intended or unintended) on food crop production? • VODF area: Did availability and quality of food/nutrition at the household level change through increased agricultural productivity promoted by the project? • VODF area: Are there any signs of improvement in household diets, either qualitative (e.g. type of food consumed) or quantitative (level of oil intake, number of meals)? 	MTR Focus group discussion Self-assessment Individual interviews in the field
II.D. Natural resources and the environment	<ul style="list-style-type: none"> • To what extent did the project contribute to/affect the preservation, conservation and sustainable management of natural resources (land, water, forest, pasture, fish stocks, etc.)? • To what extent has community access to natural resources changed (particularly that of the poor)? • Did exposure to environmental risks change? What were the environmental impacts of oil palm cultivation, other vegetable oil plantation and industrial oil seed processing? • Was the project area exposed to climate change, and if yes, what were the consequences on natural resources and the environment? Did the project facilitate any mitigating measures? 	MTR Focus group discussion Individual interviews in the field Direct observation Self-assessment Environmental impact assessments

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective II. Assess Rural Poverty Impact		
II.E. Institutions and policies	<ul style="list-style-type: none"> • Did the project contribute to increased transparency and improved governance of public authorities and institutions? • To what extent have public authorities involved in the project improved their responsiveness and accountability to the needs of poor farmers? • To what extent has the private company involved in the oil palm component improved its responsiveness and accountability to the needs of poor farmers? • To what extent did the project contribute to improved performance of service providers (private or public) in servicing the rural poor? • To what extent did IFAD operations contribute to the enforcement of national/sector policies that positively affect the livelihoods of the rural poor? 	Focus group discussion and interview Self-assessment
Evaluation Objective III. Assess Other Performance Criteria		
III.A. Sustainability	<ul style="list-style-type: none"> • VODF component: was a specific exit strategy prepared and agreed upon by key partners to ensure post-project sustainability? • How are the reflows being managed? Are they being used to acquire new land? • VODF component: what are the chances that benefits generated by the project will continue after the end of the current phase, and what factors militate in favour of or against maintaining benefits? • What is the likely resilience of economic activities (particularly of poor farmers) to shocks, exposure to competition and/or reduction of subsidies/incentives? • Is there a clear indication of government commitment (at both the national and local levels) to supporting a second phase, for example, in terms of provision of funds for selected activities, human resources availability, policy continuity, participatory development approaches, and institutional support? • Is there a clear commitment by the private sector in the oil palm component to supporting a second phase, in terms of funding, staffing, investment and commitment to the social and environmental aspects of the project? • Do project activities benefit from the participation and ownership of local communities, grass-roots organizations and poor farmers? • Are involved organizations/institutions endowed with sufficient staff, recurrent budgets and a mandate to continue providing critical services? Is the current organizational structure, staffing and financing of KOPGT sustainable? Will it be able to represent smallholders once harvesting and milling operations begin? • Are the adopted approaches technically viable? Do project implementers have access to adequate training for maintenance and to spare parts and repairs? • Are the ecosystem and environmental resources (e.g. fresh water availability, soil fertility, vegetative cover) likely to contribute to project benefits, or is there a depletion process taking place? 	MTR PCO documentation Supervision reports Environmental impact assessments Self-assessment

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective III. Assess Other Performance Criteria		
III.B. Innovation, replication and scaling up	<ul style="list-style-type: none"> • How innovative is this project? What are the characteristics of innovation (e.g. private-sector partner and commodity approach)? Are the innovations well established elsewhere, but new to the country or project area? Are they consistent with IFAD's definition of innovation? • How did the innovation originate (e.g. through the beneficiaries, government, IFAD, NGOs, research institution, etc) and was it adapted in any particular way during project/programme design? • VODF: were successfully promoted innovations documented and shared? Were other specific activities (e.g. workshops, exchange visits, etc.) undertaken to disseminate the innovative experiences? • Did the project make proactive efforts to engage in policy dialogue and strengthen partnerships in order to promote the replication and scaling up of successful innovations? • Have these innovations been replicated and scaled up, and by whom? If not yet the case, what are the realistic prospects that they could be replicated and scaled up (if so, by whom)? 	Technical review Supervision reports MTR Interviews with staffs of ministries and PCO Self-assessment
Evaluation Objective IV. Assess Performance of Partners		
IV.A. Performance of IFAD	<ul style="list-style-type: none"> • Did IFAD mobilize adequate technical expertise in project design? • What was the role of IFAD in establishing the partnership between the Government and BIDCO Uganda Limited? Was IFAD successful in ensuring that the project was sufficiently pro-poor? • Were specific efforts made to incorporate the lessons and recommendations from previous independent evaluations and self-assessment in project design? Did IFAD adequately integrate comments made by the quality enhancement and quality assurance processes? • How effective was IFAD in working with using the cooperating institution (World Bank first, and subsequently UNOPS)? • Has IFAD exercised its developmental (environmental and social safeguards) and fiduciary responsibilities, including compliance with loan and grant agreements? • Was prompt action taken to ensure the timely implementation of recommendations from supervision and implementation support missions, including the MTR? • Did IFAD undertake the necessary follow-up to resolve any implementation bottlenecks? • Has IFAD made proactive efforts to be engaged in policy dialogue activities at different levels? • Has IFAD been active in creating an effective partnership and coordination among key partners to ensure the achievement of project objectives? • What is the role and performance of the IFAD Country Officer (Mr. Pontian Muhwezi – IFAD Policy Programme Coordinator based in Uganda from 2006)? 	Formulation report Appraisal report Supervision reports MTR Interview with IFAD/CPM for Uganda, PCO, government officials, representative of the private sector (BIDCO) Self-assessment

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective IV. Assess Performance of Partners		
IV.B. Performance of the Government and its agencies	<ul style="list-style-type: none"> • Has Government assumed ownership and responsibility for the project? By its actions and policies, has it been fully supportive of project goals? • Has adequate staffing and project management been assured? Have appropriate levels of counterpart funds been provided on time? • Has project management discharged its functions adequately, and has government provided policy guidance to project management when required? • Did Government ensure adequate coordination among the various departments involved in execution? • Has auditing been undertaken in a timely manner and reports submitted as required? • Has an effective M&E system been put in place and does it generate information on performance and impact that is useful for project management to take critical decisions? • Has Government contributed to planning an exit strategy and/or making arrangements for continued funding of certain activities? • Have loan covenants and the spirit of the loan agreement been observed? • Has Government facilitated the participation of NGOs and civil society where appropriate? • Have the flow of funds and procurement procedures been suitable for ensuring timely implementation? • Has Government been effective in selecting the private-sector partner and locating the land for the oil palm development component? 	<p>Supervision reports MTR Interview with IFAD/CPM for Uganda, PCO, government officials, representative of private sector (BIDCO) Self-assessment</p>
IV.C. Performance of cooperating institution (CI) (World Bank/UNOPS)	<ul style="list-style-type: none"> • Has the supervision and implementation support programme been well arranged (frequency, composition, continuity)? Has the CI complied with loan covenants? • Has the CI been effective in financial management? • Has the CI sought to monitor project impacts and IFAD concerns, e.g. targeting, participation, empowerment of the poor and gender aspects? • Have implementation problems been highlighted and appropriate remedies suggested? • Has the CI promoted or encouraged self-assessment and learning processes? • Has the supervision process enhanced implementation and poverty impacts? • Has the CI been responsive to requests and advice from IFAD when carrying out its supervision and project implementation responsibilities? • What was the rationale for the change of cooperating institution from World Bank to UNOPS? Was the change justified? 	<p>Supervision reports MTR Interview with IFAD/CPM for Uganda, PCO, government officials, representative of the private sector (BIDCO) Self-assessment</p>

CRITERIA	SPECIFIC EVALUATION QUESTIONS /INDICATORS	DATA SOURCES
Evaluation Objective IV. Assess Performance of Partners		
IV.D. Performance of private sector (BIDCO)	<p><u>Private sector as cofinancier:</u></p> <ul style="list-style-type: none"> • Was the private sector (BIDCO Uganda Limited) well chosen to be cofinancier in terms of congruence of mandates? • Have adequately and timely resources been made available as agreed? • Has there been adequate coordination with the PCO? • Did specific requirements by the private sector as cofinancier (e.g on procurement or on audits) add substantial transaction cost to borrower? Is there room for improvement under future cofinancing arrangements? • Is there potential for scaling up or continuing the private sector's contributions/actions? <p><u>Private sector as implementing partner/service provider:</u></p> <ul style="list-style-type: none"> • Has the private sector been involved in the project as envisaged? • Has the private sector been active in encouraging project implementation? • How effectively has the company (OPUL) fulfilled its contractual service agreements? • Has it acted to strengthen the capacities of rural poor organizations (KOPGT)? • How can it contribute to the sustainability of project activities? 	<p>Supervision reports MTR Interview with IFAD/CPM for Uganda, PCO, government officials, representative of private sector (BIDCO) Self-assessment</p>

Membership of the Core Learning Partnership

Okaasai Opolot	Commissioner Crop Production & Marketing
George A Otim	Assistant Commissioner, Monitoring & Evaluation, MAAIF
Rosetti Nayenga	Deputy Head/BMAU/MFPED
Vincent Owor Adipa	Administration Manager, Oil Palm Uganda Ltd (OPUL)
Nelson Basaalidde	Manager, KOPGT
Stella Apolot	Uganda National Bureau of Standards (UNBS)
Augustine Mwendya	Uganda National Federation of Farmers (UNFFE)
Tom Anang-Odur	Chairman, UOSPA
C.K. Semakula	Acting Commissioner, Farm Development
Yovan Ogwang	District Agricultural Officer – Apac
J.P. Ayo	District Agricultural Officer – Mbale
Byabakama Blasto	District Production Manager – Masindi
Peter Ajungo	District Agricultural Officer – Lira
Connie Magomu Masaba	Project Coordinator, VODP
Peter Abong	Senior Agricultural Officer/Technical Officer, VODP
Zakayo Muyaka	Principal Agricultural Officer/Technical Officer, VODP
Robert Khaukha	Principal Quality Assurance Officer, VODP
Andrew Brubaker	IFAD, Evaluation Officer
Marian Bradley	IFAD, Country Programme Manager for Uganda
Pontian Muhwezi	IFAD, Country Officer

Mission Itinerary and Persons Met*

2/2/09	Project Coordination Office	
	Connie Magomu Masaba	Project Coordinator, VODP
	Robert Khaukha	Principal Quality Assurance Officer, VODP
	Peter Abong	Senior Agricultural Officer/Technical Officer, VODP
	Zakayo Muyaka	Principal Agricultural Officer/Technical Officer, VODP
	Anthony Ogwang	Project Accountant
	Patrick Opolot	Procurement Assistant
	Rosylina Asimwe	Accounts Assistant
	George Nsubuga	Accounts Assistant
	Margaret Kasasa	Project Administrator
3/2/09	Ministry of Agriculture, Animal Husbandry and Fisheries (MAAIF)	
	Okaasai S. Opolot	Acting Director, Crop Resources
	George A. Otim	Assistant Commissioner, Monitoring and Evaluation
	Catherine Semakula	Ag. Commissioner, Farm Development,
	Sandra Mwebaze	For the Commissioner Animal Production & Marketing
	Opolot Henry Nakelet	Senior Agricultural Officer
	Economic Policy Research Centre (EPRC), Makerere University	
	Sarah Ssewanyana	Director
4/2/09	Ministry of Finance, Planning and Economic Development (MFPED)	
	Keith Muhakanizi	Deputy Secretary to Treasury
	J.C Ogol	Senior Finance Officer
	Rosetti Nabbumba Nayenga	Deputy Head, Budget Monitoring & Accountability Unit
	Kalangala Oil Palm Growers Association – Inaugural meeting	(no attendance list)
5/2/09	KOPGT Secretariat	
	Nelson Basaalidde	Manager
	Stephen Esamu	Accountant
	Fred Masolo	Credit Officer
	Najjeba Allen	Administrator/Secretary
	Emmanuel Twinamatsiko	Field Officer
	Stephen Ddngu	Field Officer
	Anthony Omal	Field Officer
	Charles Kateregga	Field Officer
	Turyahikayo Frnk	Field Officer
	Kalangala District Local Government (KDLG) Officials	
	David Balironda Mukasa	District Production Officer/District Agricultural Officer
	Harriet Saawo	Director, Natural Resources
	Edward Muwanga	District Veterinary Officer/HIV Focal Person
	Ntakimanye Aggrey	Forest Supervisor/National Forestry Authority
	Benson Ngundu	Assistant Agricultural Officer
	Hillary Bitakalamire	Director, Health Services
	Julius Mukasa	Sec for Health & Education, LCV
	Edward Bugimbi	District Health Inspector
	Florence Bbosa	District Education Officer
	John Sendi	Staff Surveyor
	Geoffrey Kasule Guyo	Chief Finance Officer
	Martin Lugambwa	Sec. for Finance, LCV

Mugera Isaach	District Internal Auditor
Samuel Kasirye	District Planner
Samson M. Ouncho	Senior Personnel Officer
Godfrey Mukasa	Clerk to Council

6/2/09 Oil Palm Uganda Ltd (OPUL)

Lim Choon Meng	General Manager
Vincent Owor Adipa	Administration Manager

7/9/09 Kalangala Oil Palm Growers

Muyomba Martin, Kiyimba Kalaudiyo, Lubega Joseph, Mukiibii Deo, Kirana David, Katende F, Kimanje Richard, Luyinda Francis, Mulamula Francis, Mubiru Kawunde Gerald, Mukasa Vererino, Galidde John, Kyewunda Deo, Kiggundu Francis, Nsubuga B Felix, Kagwa Abdu, Namutebi Betty, Ajuria Emmanuel, Lukwago Freddie Kiggundu

8/9/09 OPUL Estate Workers at Buguzi 80 workers present (no attendance list)

Fisher-folk at landing site: 78 people present (no attendance list)

9/9/09 KDLG Extension Staff

David Balironda Mukasa	District Production Officer/District Agricultural Officer
Robinah Nakamatte	Assistant Agricultural Officer
Justine Tuweereza	Assistant Agricultural Officer
Benson Ngundu	Assistant Agricultural Officer
Primrose Namuddu	Agricultural Officer
Moses Nkonte	Agricultural Officer
Ronald Muteyi	District NAADS Coordinator

Kalangala non-oil palm-growing farmers

Kiggundu Samuel, Buziga Yusufu, Kitubi Charles, Ssonko Robert, Nakyanzi N, Lugalama Vincent, Tibagirirwa C, Ssenabulya Tony, Kafeero Edward, Baliruno Joseph, Beni Kityo, Naluwoza Maria, Kakooza, Munyoola Vincent, Kizito Edward, Ssemwanga James, Kayanga Herbert, Byabudde A.F., Jjumba Andrew, Muusanse Godfrey, Nakato Margaret

11/2/09 National Environmental Management Authority (NEMA)

Onesimus Muhwezi	Director, Environmental monitoring and compliance
Eugene Muramira	Director, Quality, Planning & Information
Arnold Waiswa Ayazika	Environmental Impact Assessment Coordinator
Herbert Oule	Senior Environmental Specialist

Impact Management System (IMS)

Nelson Basaalidde	Kalangala Oil Palm Growers Trust Secretariat (KOPGT)
Arnold Waiswa-Ayazika	National Environment Management Authority (NEMA)
Paul Buyerah Musamali	National Forestry Authority (NFA)
Nelson Omagor	Nelson & Associates Environmental Consultants
Vincent Owor Adipa	Oil Palm Uganda Ltd. (OPUL)
Maurice Bafiirawala	Kalangala District Local Government (KDLG)

13/2/09 Tororo District: Citronella Growers

NaCRRRI research staff:

Sophy Musaana	Principal Research Officer
Rita Nabuzale	Socio-economist

Farmers: Okoth Joseph Obungila, Semiriko Olweny, Oketcho Ezekiel, Patrick Ongaro, Ochieno Hannington, Ombito Godfrey, Okado Charles, Owora Tomas, Jakong Nekodemmas, Okello Bata, Joseph Othieno, Yovan Owino

14/2/09 Mbale District: Sunflower growers in Busiu Subcounty

Local Government Officials and Extension Staff:

J.P Ayo	District Agricultural Officer
Nathan Mabanga	Field staff

Farmers: Beta Wakooli, Wamaeke George, Betty Masaba, Nora Shisilo, Harriet Masaba, Grace Wasilwa, Malongo Jesca, Mary Mabonga, Margaret Malemo, Alesia Soita, Agnes Wanda, Soita Martin, Nasike Jane, Edisa Nasanga, Agnes Wekoyela, Lovisa Mungoma, Makhafu Richard, Masindi Michael, Wamboga J. Kakas, Musamali Moses, Wambette George, Muboogi Yekolamu, Welishe Akisofeli, Wambi Michael, Nambuya Grace, Loyce Naswali, Wamboka Daniel, Sylvia Wananda, Nathan Wamusaayi, Agnese Welishe, Wamanga Nelson, Nambafu Yejusa, Wekese Bazilio, Kelvin Peter, Maati Elly, Butayo Patrick, Wamboko David, Mabonga Michael, Agiri Wand, Ester Mujasi, Wanda Christopher, Samson Walumbe, Namaulula Peter, Wamuliota Lovisa, Wakauna James, Nabushawo Jennifer

16/2/09 Soroti District

Local Government Officials and Extension Staff

Stephen Ochola	Chairperson, LC V
Gimogoi Wanyenze	Chief Administrative Officer
W.W. Oketta	Ag Production Coordinator
Martin Ameu	District Agricultural Officer
Peter Oryem	Subcounty Chief
James Opolot	CBSC
C.F. Emaju	Agricultural Officer
John Onangole	Agricultural Officer
Vincent Giro	Agricultural Officer
Stephen Eperu	Agricultural Officer
J. Odiény	Assistant Agricultural Officer
Okoror Okello	Assistant Agricultural Officer
Richard Elwelu	Assistant Agricultural Officer
M Amuriat	Assistant Agricultural Officer
George Oruka	Assistant Agricultural Officer

Soroti Farmers Tubur Subcounty: Eseru Samuel, Egumu Joseph, Okiror John Robert, Oriokot Willy, Opolot James, Orwii Isaiah, Epenu Stephen, Etapu Sam, Arenko Mary, Egopnu Faustine, Araata Ben, Eyoku Peter, Edoku James, Okodu Peter, Asenya Charles, Emuku Augustine, Eyodu Yuventine, Ounen Peter, Erabu John Michael, Aliao Maguret, Achen Stella, Epolon J Ochen, Elero Simon, Amugo Parlina, Amulen Grace, Angwaro Mary, Elapu Juventine, Adiao Mary, Aango Sabina, Apio Shara, Abiro Grace, Aguro Loyce, Okiror Johnson, Edwen Robinson, Eulu J Bosco, Etwaru Julius, Elubu Joseph, Osega Julius, Opela Martin, Oiliga Robert, Oluka James, Omura Richard

17/2/09 National Semi-Arid Resources Research Institute (NaSARRI)

Thomas Areke	Director
George Epieru	Research Officer
Walter Anyanga	Research Officer
Paul Anguria	Research Officer
Solomon Ogwal	Research Officer
Piw Elobu	Research Officer
Moses Biruma	Research Officer
David Kalule Okello	Research Officer
James Ocan	Senior Technician
Paschal Nalyongo Watiti	Senior Technician
James Oumo	Laboratory Technician

18/2/09 Lira District**Local Government Officials and Extension Staff**

Angon Gidumoi	MP Erute North
Janet Atyang Akello	Secretary Production Marketing & Natural Resources
Lottar Okolimo	Chief Administrative Officer
Richard Adoko	Financial Controller
Tom Etil	District Statistician/District Planner
Jaob Owesa	District Production Coordinator
Peter Ajungo	District Agricultural Officer
Mike Ario	Agricultural Officer
Ebonga Samuel	Agricultural Officer
George Olet	Assistant Agricultural Officer/DAO
Joseph Adoli	Assistant Agricultural Officer/Apala
Margaret Angom-Ogwang	Assistant Agricultural Officer /Lira
Edward Okullo	Assistant Agricultural Officer/Amugu
Walter Okidi	Assistant Agricultural Officer/Aromo
Ogwang Bosco	Assistant Agricultural Officer /Adwaru S/C
Alfred Etuku	Assistant Agricultural Officer /Aloi
Alfred Okoda	Assistant Agricultural Officer

19/2/09 Northern Uganda Oil Millers' Association

Deogratias Kibirige	Akony Kori
Joel Olet	Guru Nanak Oil Mills
Patrick Wanabagala	Guru Nanak Oil Mills
G. Ranap	Shri Kirshna Agro Ind. Ltd
Gorakhanap	Shri Kirshna Agro Ind. Ltd.
Peter Otimodich	Executive Director UOSPA
Rose Ongom	Director UOSPA
Ray Bruno Agongo	UOSPA

Lira Farmers, Adekokwok Subcounty

Alli Patrick, Okello Moses, Ayo George, Ogwal Francis, Ogwal Joasper, Enoka Okae, Ogwang Tony, Onoo John, Ogwal Moss, Paskolina Odwar, Hellen Ogwang, Celina Oleke, Christine Odongo, Josphine Alii, Betty Ogwal, Nyang Richard, Margret Ogweo, Grace Orim, Betty Abwango, Kacrine Ojok, Harriet Odongo, Seckondina Ddyer, Molly Onoo, Selina Oleke, Sivia Ogwang, Flwo Olet Tom, Helen Ogwang, Oteno Bena, Odyer Morish, Abwango Geoffrey, Odugo Tom, Odongo Bosco, Ayo Abudonic, Plo Ayo George, Teddy Etyaga

20/2/09 Site visits to oil mills and seed suppliers

Mukwano Group of Companies, Lira (David Luseesa, Extension Services Manager)
 Guru Nanak Oil Mills (Surgit Singh, Managing Director)
 Awowo Millers

Farmers' Centre Ltd.

Jannet Otim	Managing Director
Herbert Okello	Procurement Officer

UOSPA regional office

Fredrich Doi	Supervisor
Sydney Ogwali	Field Extension Worker
James Olwi	Field Extension Worker
Robin Okello	Field Extension Worker
Anna Omara	Field Extension Worker

Lira Farmers, Amuca Parish

Olet Benson, Okello Tom, Ayo Tom Richard, Oyiye Augustine, Lily Ongola, Evaline Okello, Siliva Opio, Margret Okullo, Lily Obot, Grace Anyany, Hellen Ayo, Caroline Angulu, Betty Ojok, Christine Obot, Agnes Okello, Santana Adile, Lucy Ogwang, Okello Kenneth, Obot Jimmy, Alawa Emmanuel, Procussy Ongola, Acila Bosco, Odur James, Anyang Richard

21/2/09 Apac District**Local Government Officials and Extension Staff**

Yovan Ogwang	DAO
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Farmers: Severino Oayo, Ogwal Katherine, Esther Orech, Sivia Abang, Martin Owera, Milton Engima, Joyce Ogwang Ayok, Lucy Odongo, Owera Orech, Hellen Ogwal, Obalo Jimmy, Okidi James, Dolly Oeloch, Jerafansio Orec, Livingston Okula, Bosco Okello, Rose Adoli, Levi Okoko, Bito Akodo, Teddy Akodo, Atino Ketty, Karololin Anura, Grace Akodo, Obel Robert, Ojok Maxmel, Odyero Mose, JP Okao, Dorcus Ongima, Nastacia Agole, Odyex Moses, Richard Agole, Akello Nonina, Atim Fred, Okeng Richard, Owera Orech, Nastancia Agole, Joyce Ogwang Ayok, Rose Okullo, Ankiilo Oot, Eceny David, Ester Onec, Odyek Moses, Lillian Otim, Betin Otim, Beca Oree, Akelo, Okeng Richard, Adoli Peter, Apet David Bar-acut, Mango Ogwal Paul, Anjilo Oot Baracut,

23/2/09 Masindi District**Local Government Officials and Extension Staff**

Lucy Oding	Secretary Production & Marketing, LC V
Milton Karafa Kato	Chief Administrative Officer
Byabakama Blasto	District Production Coordinator
Sam Wakibi	District Natural Resources Officer
William Nsimiire	District Education Officer
Moses Kalyegira	Senior Revenue Officer
Zephaniah Kwizera	Senior Internal Auditor
R. Nyangoma	Accountant
Prudence Alituha	Senior Fisheries Officer
Godfrey Bihemaiso	Senior Comm. Dev. Officer
Jimmy Eyiiga	Ag. M/S Kiryadongo
Robert Kajura	Supervisor Of Works
Edison Kajura	Records Officer
Andrew Noah Chebet	Senior Agricultural Officer
Annet Katwesige	Agricultural .Officer/ Karujuba S/C

Issa H Byenkya	Agricultural Officer/ Kiryadongo
Abdu Mugisha	Agricultural Officer/ Kigimba
Enid Karungi	Agricultural Officer/ Pakanyi
Job Byaruhanga	Assistant Agricultural Officer/Masindi
Abdul Mukasa	Assistant Agricultural Officer /Pakanyi SiC
Peter Obonyo	Assistant Agricultural Officer /Budongo S/c
Peter Kiirya	Assistant Agricultural Officer /Bwijenge S/c
James Opolot	Assistant Agricultural Officer
B. Muhumuza	Assistant Agricultural Officer
Chris Byarugaba	Field Officer, Headquarters
Jibril Kwikiriza	Field Officer Headquarters
Enid Karungi	Field Officer Karujubu S/C
Peter Iirya	Field Officer Bwijanga S/C
Abdul Mukasa	Field officer Pakanyi S/C
Annet Katwesige	Field Officer Nyangahya S/C

Site visit to seed company

Kyomya Farm Supply Centre (John Kyomya, Owner)

Masindi Farmers, Labongo Lworo Displaced Women Farmers' Group

Judith Aia, Flida Acen, Roseline Akongo, Agness Otto, Estra Komakeg, Mary Oruk, Lucy Oporu, Grace Oboko, Ajentinora Orach, Santra Akera, Betty Oolla, Hellen Odell, Geto Ocan, Ciciliya Ocaka, Euerline Ojaria, Lilly Aneko, Jocy Lukwiya, Jocy Oryema, Penina Oyai, Ajulina Obwalo, Joseline Lalam, Kerani Labeja, Everina Opiyo, Florence Ocay, Florence Acaye, Christine Amone, Christine Alanyo, Christine Ayaa, Jocy Otoo, Hellen Ociti, Setela Akello, Dorothy Amal, Poline Okello, Sirina Okeny, Hellen Lalam, Sarapina Abur, Magret Okoyo, Marata Oyoo, Ajulina Langol, Flida Ocan, Nithy Ocen, Evarline Obolgui, Grace Orocha, Jasinta Otoo, Christine Okomakec, Irine Obita, Chartarine Onene, Margaret Oyet, Margret Adong, Babena Opwanya, Joshua Ocan, Cirina Okello, Rose Ajok, Jully Akoko, Sicobia Acayo, Margaret Aloyo, Josephine Akello, Aloyo Dorin, Jocy Ocuuni, Margaret Adong, Abalo Betty, Abina Arach, Caroline Aceno, Agness Lanyero, Christine Odong, Okello Samuel, Oola Cox, Obwalo James, Odokonyero George, Okongo D, Opillu Willy, Jalal Okoyo, Oryem Rojas, Onenen Alfred, Otto Livingstone, Orot William, Orot Victor

24/2/09 Masindi Farmers, Mpumwe Farmers' Association

Masaba Christopher, Higenyi Isaac, Simiyu Josam, Selina Evalin, Naiga Getrude, Alfred Kwegumya, Mwamisi John, Mumelo Joph, Nelima Fatuma, Musa Situma, Twahulirwe Julius, Mugisa Stephen, Owonda Christino, Musinid Cyprian, Kasaijo David, Ndiyanabo Zainabu, Girango Alice, Myamakinyi, Noath, Kasaija Jane, Massaba P Robert, Mikhalwa Bernard, Wamono, Saleh Fred, Makayi Robert, Masaba Franco, Wamono Godfrey, Mutonyi Arini, Muyamid Evalin, Buwayo Teflilo, Nyirazinza Pte, Natula Beatrice, Sibeki Patrick, Kerunga John

25/2/09	IFAD Field Office	
	Pontian Muhwezi	Country Officer
	BIDCO Oil Refineries Ltd	
	Kodey A. Rao	Managing Director
	National Crop Resources Research Institute (NaCRRRI)	
	James A Ogwang	Director Research
	Sophy Musaana	Principal Research Officer
	Paul Bglitte	Agronomist
	Jane Were	Technician
	Paul Kabayi	Technician
	Umtoni Phiona	Technician
26/2/09	Uganda Oil Seeds Producers and Millers Association (UOSPA)	
	Tom Anang-Odur	Chairman
	Peter Otimodich	Executive Director UOSPA
	Mukwano Group of Companies	
	Tony Gadhoke	Chief Executive Officer, Uganda
	Vegetable Oil Development Council (VODC)	
	Tom Anang-Odur	UOSPA
	Charles Ogol	MFPED
	Augustine Mwedyia	Uganda National Farmers Federation (UNFFE)
27/2/09	National Agricultural Research Organization (NARO)	
	Emily K. Twinamasiko	Director, Research Coordination
	Danida	
	Jaap Blom	Team Leader, Agribusiness Development
	Oil Seeds Subsector Platform (OSSUP)	
	Duncan Mwesigye	SNV, Senior Adviser Economic Development
	Ivan Tumuhimbise	SNV/SCAPEMA
	Maiche V Schie	SNV Rwenzori
	Paul Bukenya	Consultant, SNV
	Dorothy Nakimbugwe	Makerere University
	David Moses Opero	Makerere University
	Robert Nayebare	Makerere University
	Tom Anang-Odur	UOSPA
	Norah A. Ebukalim	UOSPA
	Ray Agong	UOSPA
	M. Kamurembe	NARO
	Agnes Kirabo	VEDCO
	Stella Apolot	UNBS
	Grace Kazigati	NAADS/Chairperson-Rwenzori platform
	Jaap Blom	Danida
	Zakayo Muyaka	VODP
28/2/09	Coffee Research Centre (National Crop Resources Research Institute)	
	M.P.E Wetala	Principal Research Officer
	Alice Nambuya	Technician
	Sammy Olal	Technician

3/3/09 Uganda National Bureau of Standards (UNBS)

Terry Kahuma	Executive Director
Ben Manyindo	Deputy Executive Director (Technical)
Stella Apolot	Technical Officer
Martin Imalingat	Senior Standards Officer
Aziz Mukota	Head, Chemistry Lab
Barbra Katusiime	Public Relations Officer

4/3/09 Wrap-up meeting at MAAIF

George A Otim (Chair)	Assistant Commissioner, Monitoring & Evaluation MAAIF
Rosetti Nayenga	Deputy Head/BMAU/MFPED
Vincent Owor Adipa	Administration Manager, Oil Palm Uganda Ltd (OPUL)
Nelson Basaalidde	Manager, KOPGT
Stella Apolot	Uganda National Bureau of Standards (UNBS)
Augustine Mwendya	Uganda National Federation of Farmers (UNFFE)
Tom Anang-Odur	Chairman, UOSPA
C.K. Semakula	Acting Commissioner Farm Development
Yovan Ogwang	District Agricultural Officer – Apac
J.P. Ayo	District Agricultural Officer – Mbale
Byabakama Blasto	District Production Manager – Masindi
Peter Ajungo	District Agricultural Officer – Lira
Connie Magomu Masaba	Project Coordinator, VODP
Peter Abong	Senior Agricultural Officer/Technical Officer, VODP
Zakayo Muyaka	Principal Agricultural Officer/Technical Officer, VODP
Robert Khaukha	Principal Quality Assurance Officer, VODP
Andrew Brubaker	IFAD, Evaluation Officer
Pontian Muhwezi	IFAD, Country Officer
Alison Scott	IFAD Interim Evaluation Team (Team Leader)
Asaph Besigye	IFAD Interim Evaluation Team
Ole Olson	IFAD Interim Evaluation Team

*Not all farmers signed the attendance lists

Bibliography

IFAD Corporate Documents

- IFAD (1994). *Vegetable Oil Development Project Specific Identification Report*, June.
- IFAD/FAO (1995). *Vegetable Oils Development Support Project Formulation Report*. Report No 63/95 IFAD-UGA 26, June.
- IFAD (1997). *Vegetable Oil Development Project Appraisal Report*. Vol. I Main Report and Annexes, Vol. II Working Papers. Report No 0735-UG, 29 April.
- IFAD (1997). *Report and Recommendation of the President to the Executive Board on a Proposed Loan to the Republic of Uganda for the Vegetable Oil Development Project*. EB 97/60/R.13/Rev 1. 30 April.
- IFAD (1998). *Loan Agreement between the Republic of Uganda and the International Fund for Agricultural Development (Vegetable Oil Development Project)*, Loan No 442-UG, 26 May.
- IFAD (2005). *Oil Palm Component Review Report*. Report No 1606-UG February.
- IFAD (2006). *IFAD Strategic Framework 2007-2010*. EB 2006/89/R.2/Rev.1. December.
- IFAD (2006). *Reaching the Rural Poor: IFAD Policy on Targeting*. EB 2006/88/R.2. September.
- IFAD (2005). *IFAD's Private-Sector Development and Partnership Strategy*. EB 2005/84/R.4/Rev.1. April.
- IFAD (2004). *Republic of Uganda Country Strategic Opportunities Paper (COSOP)*. EB 2004/82/R.10. September.
- IFAD (2009). *IFAD's Environmental and Social Assessment Procedures*. EB 2009/96/R.7 April.
- IFAD (2009). *Evaluation Manual: Methodology and Processes*. Office of Evaluation, April.

Project Documents

- Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) (1998/1999-2007/2008), *VODP Annual Reports*.
- MAAIF/World Bank (1999-2003) *VODP Supervision Reports*.
- MAAIF/World Bank (2004) *VODP Mid Term Review Report*, October.
- MAAIF/UNOPS (2004-2009) *VODP Supervision Reports*.
- MAAIF (various years) *VODP Progress Reports for the UNOPS/IFAD Supervision Missions*.
- MAAIF/IFAD (2008) *VODP Supervision Report*, December.
- MAAIF (2008) *Project Coordination, Office Self Evaluation and Lessons Learnt, Report for the IFAD Independent Interim Evaluation*, November.

- MAAIF (1999) Vegetable Oil Development Project Baseline survey Report, September.
- MAAIF (2005) VODP Monitoring and Evaluation Strategy, January.
- MAAIF (2006) Oil Palm Baseline survey Final Report, November.
- MAAIF (2007) Vegetable Oil Development Fund Impact Assessment Study, March.
- MAAIF (2008) Impact of citronella on food security.
- Government of the Republic of Uganda (2000) *Memorandum of Understanding between the Government of the Republic of Uganda and BIDCO Oil Refineries Ltd. for the Development of Oil Palm Industry in Uganda*, 10th February.
- Ministry of Finance, Planning and Economic Development (MFPED) (2003) *Agreement between the Government of Uganda and BIDCO Oil Company Ltd. for the Oil Palm Component of the Vegetable Oil Development Project*, 11th April.
- Ministry of Water, Lands and Environment (2005) *Application for Certificate of Registration and Trust Deed for the Kalangala Oil Palm Growers Trust (KOPGT)*, 17th June.
- MAAIF (2006) *Tripartite Agreement between the Government of the Republic of Uganda, Oil Palm Uganda Ltd and the Registered Trustees of Kalangala Oil Palm Growers Trust for Governing the Relations among the Entities*. 28th August.
- Reiner, C. (2005) *Financing and Institutional Arrangements for Small-scale Oil Palm Grower Support*. IFAD-GOU consultancy report, May.
- Bishop-Sambrook, C. and Rosenberger, M. (2008) *Value Chain Development and Extension Modalities in Traditional Oilseeds Subsector*, Consultancy report, May.
- Ghansah, B. (2008) *Visit Report on the Planned Phase II Uganda Oil Palm Development*, Consultancy report, May.
- Maalim, A. A. (2008) *Technical Backstopping (KOPGT), Final Mission Report*, Consultancy report, May.
- Other References**
- Bank of Uganda (2008) *Annual Report 2007/2008*.
- FAO/Global Information and Early Warning System (2006) *Review of Crop and Food Situation in Uganda*, 27th September.
- Grellier, R., Tanzam N., Lamberts, D. and Howard C. (2004) *The Impact of HIV/AIDS on Fishing Communities*. MRAG Ltd and Options Consultancy Services, October.
- Mangheni, M.N. (ed) (2007) *Experiences, Innovations and Issues in Agricultural Extension in Uganda*. Fountain Publishers, Kampala 2007.
- Oxford Policy Management (2008) *Independent Evaluation of Uganda's Poverty Eradication Action Plan (PEAP)*. Final Synthesis Report, 25th July.
- Ssewanyana, S. N., and Muwonge, J. (2004) 'Measuring and Monitoring Poverty: The Uganda Experience.' Paper prepared for the Poverty Analysis and Data Initiative (PADI) meeting, Mombasa, Kenya May 6-8.

- Ssewanyana, S.N., Younger, S.D. and Kasirye, I. (2006) *Strengthening the understanding of the dynamics of poverty in Northern Uganda*. Report submitted to the World Bank, June.
- Uganda Bureau of Statistics (2006) *Population Size and Distribution*. Analytical Report, 2002 Uganda Population and Housing Census, October.
- Uganda Bureau of Statistics (2007) *Uganda Demographic and Health Survey 2006*.
- Uganda Department of Fisheries Resources Uganda (2006) *National Report of the Frame Survey 2006 in the Ugandan Part of Lake Victoria*.
- Uganda Department of Meteorology (2002) *First National Communication for Uganda*, Submission to the UN Framework Convention on Climate Change, October.
- Uganda Ministry of Finance, Planning and Economic Development (2002) *Deepening the Understanding of Poverty, Second Participatory Assessment Report*, December.
- Uganda Office of the Prime Minister (2007) *National Peace, Recovery and Development Plan for Northern Uganda (PRDP) 2006-2009*. Prepared by the Technical Secretariat to the Inter-Ministerial Technical Committee (IMTC).
- UNDP (2007) *Uganda Human Development Report: Rediscovering Agriculture for Human Development*.
- World Bank (2007) *Moving beyond Recovery: Investment and Behaviour Change for Growth*. Country Economic Memorandum, Vol II: Overview. Report No 39221-UG.
- World Bank (2006) *Uganda Poverty and Vulnerability Assessment*. Report No 36996-UG. November.



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