

Changes in demographic and employment in Kalangala since the arrival of oil palm



Joselyn Bigirwa¹
Sharon Anena²
George Katunguka³

1 Gender and Social Development Analyst consultant, Kampala, Uganda. bigirwa.joselyn@gmail.com

2 Junior research associate, ENR – Africa Associates, Kireka–Kinawata Road, Kira Town, PO Box 72287, Kampala, Uganda. anena.anena@yahoo.com

3 Research and Training, Team Initiatives Ltd, Plot 29/30 Bombo Road, Kampala, Uganda. teaminitives@gmail.com, gkatunguka@gmail.com

Summary

This study was undertaken in Kalangala and Buvuma in July-August 2018, using a mix of qualitative and quantitative data collection and analysis. Statistical data was obtained from published reports. Qualitative data was cross-sectional, using focus group discussions with oil palm outgrowers, coffee and subsistence farmers, fishing communities, and Oil Palm Uganda Limited (OPUL) staff in Bwendero and Beeta, with key informant interviews including with district officials, banking institutions, Kalanagla Oil Palm Growers Trust (KOPGT), and selected hotels and other businesses in Kalangala and Buvuma towns. Results should feed into proposed implementation of the new ten-year National Oil Palm Project (NOPP).

Kalangala – Major activities were lumbering, fishing and subsistence farming, but introduction of oil palm alongside the depletion of natural forest and fish stocks led to a shift in employment, attracting a massive influx of people. In formal employment, only 15% are locals, in low and poorly paying positions, and only 18% are women. In the informal sector, including fishing, more than 85% are men. More businesses have opened to meet the demands of the growing population, and oil palm is now a

major employer in the district. The increasing income has also resulted in a rise of social evils including prostitution, HIV and domestic violence. The government and other key actors have focused on creating employment, but with no specific programmes to address social problems. The National Gender Policy 2007 obliges the government to undertake gender analysis for any programme, but none was conducted in Kalangala. Oil palm has created employment but exacerbated gender inequality, with only 30% of outgrowers being women and having smaller holdings compared to men. Also, women hold only 18% of jobs in OPUL and very few at management level. OPUL employs more than 1000 casual labourers, but information on salaries was not made available.

Buvuma – Some 70% of the population are not original inhabitants, most engaged in fishing and subsistence agriculture. The recent mass acquisition of land for oil palm has resulted in displacement and less land for farming, leading to some people moving to wetland areas to grow rice with at least 100 hectares already converted. With further loss of farmland, it is expected that levels of malnutrition will increase. Social impacts are seen with reports of family breakdowns and neglect as men sold land without involving their spouses, and some leaving to the mainland with the proceeds and never coming back, while others came back with nothing left. Oil palm will create employment opportunities, but the extent to which the local population will benefit from this project is questionable. In addition, a population surge is expected once oil palm is established, and mitigating associated negative impacts must be planned for. Many local communities are sceptical about what the project holds for them, and the government has made no effort to ensure that people are resettled properly and that money paid has been put to good use.

Methodology

The study aimed to understand the socio-economic and environmental impacts of oil palm developments on Kalangala, in particular on local livelihoods, to help ensure that good practices are replicated in Buvuma, while negative impacts are avoided. There were four key objectives, to: (i) understand the demographics, i.e. population structure, origin and migration, (ii) qualify direct and indirect employment from oil palm, (iii) quantifying in economic terms, and (iv) describe the labour force in oil palm in relation to other sectors.

A cross-sectional, participatory, and mainly qualitative approach mixed with quantitative methods of data collection and analysis were used. Participatory approaches were used to collect data from oil palm outgrowers, coffee farmers, fishing communities, small scale business operators, hotel owners/managers, OPUL, KOPGT, Kalangala Infrastructure Services (KIS), banks, and civil leaders. There were 17 in-depth interviews with outgrowers (10 women, 7 men), and 17 covering agriculture, businesses, transport, trade and tourism. In addition, 17 focus group discussions of 6-10 participants each were conducted (four, all women, nine, all men, four mixed), clustered around oil palm outgrowers (4), fishing communities (10), business communities (1) and mixed farmers (2), to obtain collective views on benefits derived, trends, opportunities, estimated population in each of subsector disaggregated by gender and origin, sources of support, and suggestions for improvement. There were 24 key informant interviews with staff of Buvuma and Kalangala district local governments, banks and tourism stakeholders among others, to get a deeper understanding of the demographic and migration issues and the economic value of growing oil palm and related employment opportunities.

Kalangala district

Demographics and population movement

Kalangala district comprises 84 islands on Lake Victoria with a total land area of 432 km². Main access is by the Bukakata-Luku ferry through Masaka district, via Nakiwogo, or from Entebbe via Kitubulu in Wakiso district to the Lutoboka landing site in Kalangala town. The district is administratively divided into two counties, with six sub-counties and one town council, 15 parishes and two town wards, and a total of 92 villages. Most of lower local governments are made up of islands demarcated on the basis of proximity to the respective local government headquarters. The main island Bugala where the district headquarters is located occupies three lower local governments.

The 1991 National Population Census estimated the population at 16,400, increasing to 34,800 by 2002, with an annual population growth rate of 6.8%. According to the National Housing and Population Census 2014 (UBOS, 2016), the population of Kalangala was 54,293 making it the least populated district in Uganda, including a 'non-household' ('floating population') population of 3121. There were 22,944 females (42%); and 31,349 (58%) males. The male population has always exceeded the female population in Kalangala due in part because the

major economic activity is fishing which is male dominated. According to the District Fisheries Officer, over 80% of the population are not from Kalangala district, with a mix from neighbouring districts of Masaka, Buikwe, Mayuge, Gomba and Bukomansimbi and a few from Tanzania, mostly men, with a few women mainly involved in processing of silver fish (*mukene*) and other businesses such as hotels at the landing sites.

Table 1: Kalangala district population trends with gender disaggregation

	1969	1980	1991	2002	2014
Male	4,682	5,072	9,929	20,849	31,349
Female	2,517	3,503	6,442	14,917	22,944
Total	7,199	8,575	16,371	35,766	54,293

Source: Kalangala District DDP 2015/16-2019/2020

Recruitment for oil palm started in late 2000, but in 2004-2009 there was only little work needed and therefore few staff. Most casual workers were recruited from outside the district because native people were more interested and familiar with fishing than farming, which was considered as hard labour. At the same time, lumbering was at its peak, and subsequently, most employed in this sector took to either working in oil palm plantations or bought land and started growing their own. At the outset, it was said that if someone chose to grow oil palm, then the company will take over their land. In most cases, land owners did not engage and 80% sold off their land altogether, in such a way that plots were sub-divided and sold to many individuals, increasing the number of people at the island. Most people who bought land were non-natives and they entered into agreements as outgrowers.

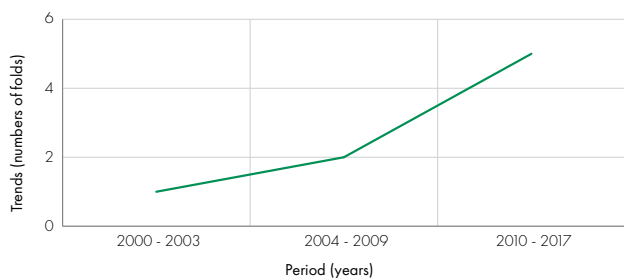


Figure 1: Employment trends in the oil palm sector

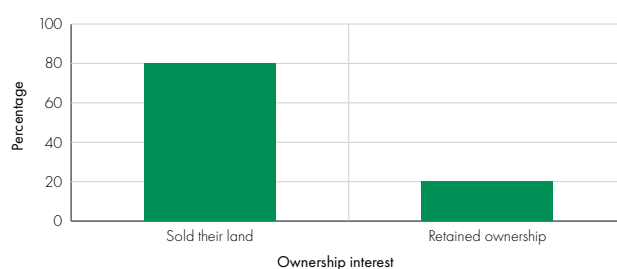


Figure 2: Proportion of landlords and land ownership

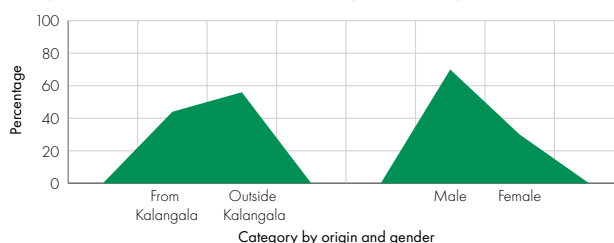


Figure 3: Proportion of employees by origin and gender in Kalangala district local government

In Kalangala district local government, more than 55% of staff come from outside Kalangala, and 70% are men. Other than local government, a number of other institutions have developed in the past decade, including banking and finance (micro credit and savings), hotels, lodges and beach resorts that are also employing mostly non-native men.

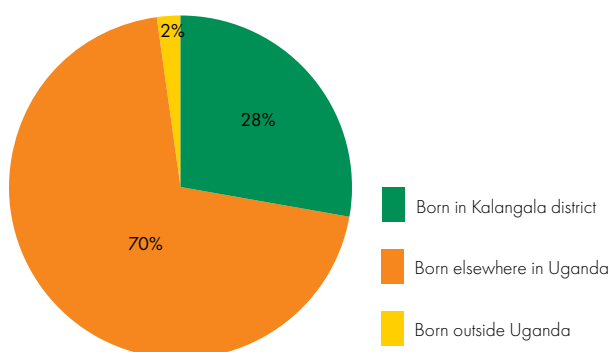


Figure 4: Population by Birth in Kalangala district

According to the national census report, 30% of the population in Kalangala is non-native, with 2% born outside Uganda, and interviews revealed that more than 70% of outgrowers are non-native. People have also moved from one sub-county to another in search of better employment opportunities. Currently, Mugoye sub-county in Bugala island has the highest number of outgrowers since a fishing ban was imposed, the census showing a shift to sub-counties with high concentrations of oil palm, with Mugoye sub-county having the highest population, followed by Bujumba.

Table 2: Population in Kalangala by sub-district

Sub county	Population 2002		Population 2014	
	Total	%	Total	%
Bujumba	6574	19	11556	21
Kalangala TC	2943	8	4980	9
Mugoye	7818	22	12224	23
Bufumira	8301	24	10292	19
Kyamuswa	2841	8	4731	9
Bubeke	2873	8	5133	9
Mazinga	3416	10	5379	10

Source: Kalangala DDP 2015/16-2019/2020

Employment

The 2014 national census (UBOS, 2016) indicates that 62% of the population in Kalangala is of working age (15-60 years old). Findings revealed that the people are employed in different subsectors including fishing, oil palm, subsistence agriculture, and various other businesses. Fishing was one of the biggest employers with more than 60% involved in different value chain activities. But according to fisheries data, this has greatly dropped by 20% due to the banning on illegal fishing. The 2014 census (UBOS, 2016) was not explicit on numbers of people involved in oil palm and therefore this was not captured as a major source of livelihood in Kalangala.

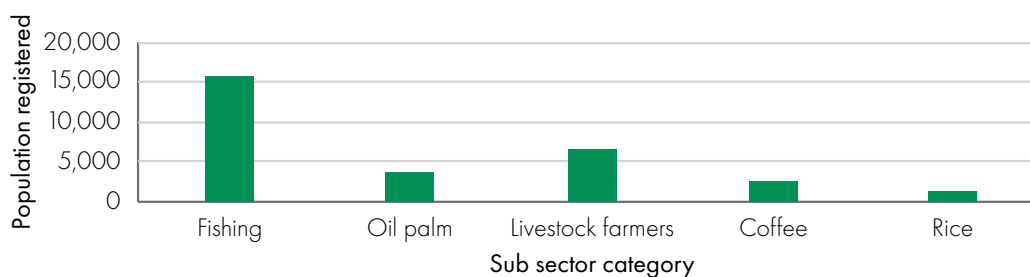


Figure 5: Major income generating sectors in Kalangala

Fishing

With over 15,800 people, fishing is the biggest employer, more than 95% men. Most women were engaged in small scale trading of silver fish, and over 60% have no other source of income. An average of UGX 14 billion is earned monthly from fishery compared to UGX 1.85 billion earned by outgrowers. The district has 64 landing sites, with about 3500 boats and 1800 boat owners of which only 5% are women. Fishing has been the major source of livelihood and income in Kalangala, however due to over fishing, fishermen resorted to other income-generating activities including oil palm and small businesses.

In the entire district, there are five big fish processing plants, one owned by a woman at Nakatiba landing site who employees over 100 workers. The peak fishing season is August–February, when each boat can catch about 50 kgs/day, earning UGX 300,000-500,000/day. Off peak season is March–July when a boat can fetch UGX 200,000-300,000/day. The fishing crew gets about 15-20% commission and each can earn UGX 25,000/day.

Table 3: Catch data by species, weight and value, 2011-2017

	Nile perch		Tilapia		Mukene		Other spp		Total	
	Total catch (t)	Beach value (mill.sh)	Total catch (t)	Beach value (mill.sh)	Total catch (t)	Beach value (mill.sh)	Total catch (t)	Beach value (mill.sh)	Total catch (t)	Beach value (mill.sh)
2011	9,918	69,426	4,325	12,975	16,117	24,176	226	362	30,586	106,938
2012	8,618	43,090	3,825	15,300	17,412	26,118	317	380	30,172	94,888
2013	8,214	69,819	3,516	17,580	18,002	54,006	321	803	30,053	142,208
2014	7,556	68,011	3,867	19,335	15,841	47,523	337	843	27,601	135,712
2015	6,223	74,676	4,421	26,526	18,608	74,432	411	945	29,663	176,599
2016	5,008	65,104	3,902	23,412	19,711	59,133	308	616	28,929	176,578
2017	4,891	68,474	4,507	31,549	15,213	60,852	256	640	24,867	161,515

Source: District fisheries data, Kalangala. July 2018

Table 4: Summary economic value for the fishing sector in Kalangala

Type of individuals	Estimated number	Estimated number of boats	Average income per boat (UGX/day)	Average income per boat (UGX/month)
Boat owners	1,500	3,500	350,000	10,500,000
Fishing crew	14,000	-	25,000	750,000
Cage farmers	124	-	-	-

Source: Interviews, July 2018

Oil palm production, employment and income

There is growing trend of people engaging in oil palm and this is now the second biggest employer for both waged and casual labourers. Oil palm consolidation and expansion activities have continued in Kalangala with a total of 10,924 ha planted, 6500 hectares as a nucleus estate managed by OPUL and 4424 ha managed by outgrowers in seven blocks of Bugala and outlying islands of Bunyama and Butembe, increasing from 3498 ha in 2012 (KOPGT, 2018) as a result of mass mobilization by KOPGT and the perceived improved livelihoods among initial outgrowers. This implies that on average, each outgrower owns about 2.4 ha.

According to outgrowers, some land that was reserved for food crop has been converted to oil palm and more land may be converted if no regulation is put in place to reserve land for food production. Meaning the remaining land will not be sufficient to produce enough food to meet local demands, with the likelihood that hunger and malnutrition might arise in households that may not earn enough to purchase nutritious foods. Of the 1810 registered outgrowers, 37% are female. Of the 1200 outgrowers that have started harvesting, each earns more than UGX 1 million a month after loan repayments and other fees have been deducted (Table 5). Harvesting started in 2010 and currently 65% of farmers are harvesting, of which 37% are women, mostly heads of households, and all farmers are expected to be harvesting by 2021.

Table 5: Farmers harvesting by block and cash payment to oil palm farmers, June 2018

Block	Male	Female	Institution	Total	Amount paid	Average per farmer
Butembe	34	15	0	49	51,119,851	1,064,996
Beeta East	155	108	4	267	335,246,037	1,255,603
Bujumba	59	27	1	87	129,855,318	1,509,945
Beeta West	152	102	1	255	431,987,807	1,700,739
Bunyama	23	11	2	36	50,922,379	1,340,062
Kagulube	121	61	4	186	370,653,954	2,014,423
Kalangala	50	22	5	77	114,206,107	1,464,180
Kayunga	146	94	3	243	362,880,795	1,499,507
Total	740	440	20	1200	1,846,872,248	11,849,455

Source: KOPGT Credit Report June 2018

BIDCO established a palm oil refinery in Jinja, processing crude palm oil from Kalangala into a range of final products. But due to insufficient supply, BIDCO also imports crude palm oil (World Bank, 2015). An interview with the OPUL Manager revealed that production is still insufficient; with Kalangala’s oil palm only able to meet two days of an average month’s processing capacity of 3000 t. The country requires 547,500 t of oil palm per year to meet the national demands, implying that BIDCO imports oil from other countries to meet this, and as such oil palm will be extended to other districts to increase production.

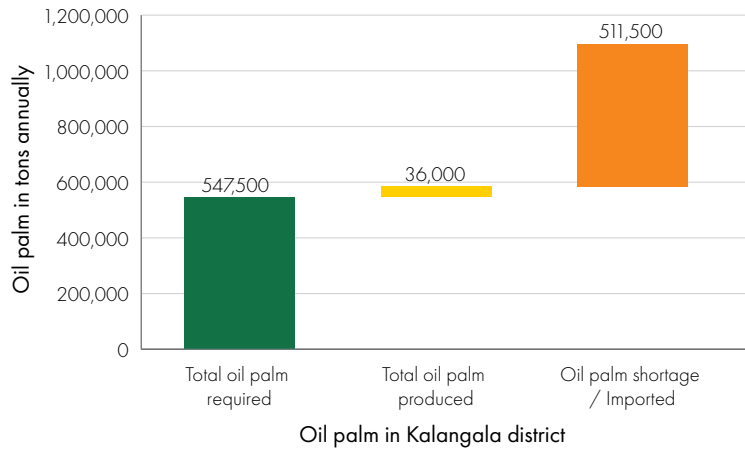


Figure 6: Oil palm production and consumption in Kalangala

The study showed the sectors with the highest labour force living in Kalangala as of July 2018. A large population is employed in oil palm as outgrowers with those that have started harvesting already earning monthly incomes. Others are employed on contractual bases by OPUL and KOPGT, with direct employment estimated at 3700 workers at various levels of production and processing. OPUL operates the nucleus estate, whereas outgrowers manage individual farms. In July 2018, the nucleus estate employed at least 1030 casual workers, while outgrowers use family labour and casual labour. Outgrowers constitute the biggest group that has directly benefited 2353 people, 1810 outgrowers and 543 casual workers in outgrower plantations. The nucleus estate employs the second highest number of people with 1302 staff including casual workers and officers.



Figure 7: Direct employment from oil palm production in Kalangala

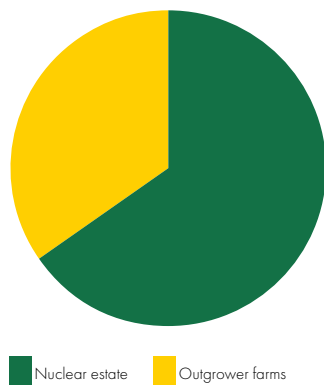


Figure 8: Casual workers for nucleus estate and out-grower farms in Kalangala

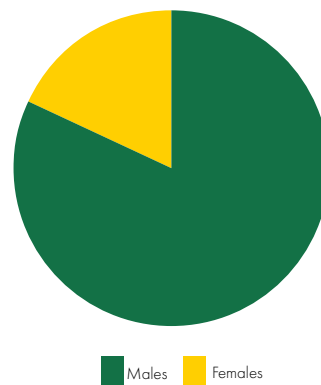


Figure 9: Segregation of OPUL staff by gender in Kalangala

The increase in income is mainly due to increase in harvests per year due to varying planting and harvesting times. Although the actual population numbers involved as outgrowers is small compared to fishing, it provides consistent income. Farming in Uganda is family based, with family size in Kalangala being 3-4 people. This provides a good picture on the biggest employment sector in Kalangala.

Table 6: Harvested oil palm income over years in UGX

	2010-2012	2013	2014	2015	2016	2017	2018	Totals
Jan	252,265,953	209,219,000	377,848,323	442,833,680	433,507,570	1,301,007,604	1,622,390,175	4,639,072,305
Feb	316,390,537	257,85,2403	283,793,565	534,046,853	380,027,295	1,247,956,540	1,705,555,925	4,725,623,118
Mar	381,309,647	362,912,130	344,976,984	557046853	880,199,628	1,354,468,115	2,967,104,736	6,848,839,911
Apr	480,563,722	431,143,923	390,381,698	684848072	1485,543,696	1,306,402,605	2,907,101,280	7,685,984,996
May	508,726,124	425,381,328	371,553,963	680158957	1,438046208	1,468,127,650	2,489,161,592	7,381,155,822
Jun	395,320,428	384,221,265	309,366,992	537301140	1,100,863,400	1,117,716,278	1,830,054,692	5,674,844,195
July	346,464,440	315,866,780	281,676,330	474694010	786,943,668	967,230,975	0	3,172,876,203
Aug	381,804,510	281,868,993	309,306,720	468160722	679,540,320	1,034,598,576	0	3,155,279,841
Sep	430,075,868	335,794,277	284,677,695	480240667	757,619,226	986,801,812	0	3,275,209,545
Oct	422,286,735	402,779,860	379,966,082	547671264	998,410,070	1,463,687,414	0	4,214,801,425
Nov	475,549,090	429,716,264	404,926,206	612664148	1,287,840,750	1,872,008,211	0	5,082,740,669
Dec	440,153,535	394,408,846	364,472,847	479038680	1,076,032,330	1,597,906,296	0	4,352,013,534
Tot.	4,830,910,589	4,231,165,069	4,102,983,405	6,499,527,864	11,304,574,161	15,717,912,076	13,521,368,400	60,208,441,564

Source: KOPGT Credit Report, June 2018

According to the OPUL manager, oil palm maturity in Kalangala is at 50% and so far 1.85 billion UGX is paid to outgrowers monthly, this implies that at full maturity, outgrowers will earn more than 3.5 billion per month. Next to outgrowers, casual workers for OPUL and outgrowers comprise the second largest population of over 1500 people that has directly benefited from the oil palm project on Bugala island. Outgrowers and OPUL were not willing to reveal estimate monthly earnings for this group but focus group discussions revealed that OPUL casual workers earn between UGX 15,000-20,000 per day which amounts to a maximum of UGX 600,000 per month. What also was not clear is whether female and male casual workers are paid equally and if the amount paid is fair and commensurate to the work done. This is one area of research that needs to be further investigated.

Kalangala Oil Palm Growers Trust (KOPGT) employs 32 people, mostly from outside Kalangala, and most male with the few women occupying only lower positions. Salaries scales for KOPGT are shown in table 9 below. However, most natives are support staff at the lowest level of the organisation and have not derived economic benefit from oil palm as much as those in higher positions who are paid fairly well.

Table 7: Staff levels, origin and economic value

Levels	Non natives	Natives	Average monthly salary (UGX)
General manager	1		6,000,000 – 7,000,000
Departmental manager	3	1	4,000,000 – 4,500,000
Senior officers	10	4	1,700,000 – 2,000,000
Support/systems staff	2	3	1,100,000 – 1,300,000
Drivers	2	6	900,000 – 1,000,000
Total numbers	18	14	

Source: Interviews with KOPGT, July 2018

Indirect employment is related to services and goods that may have become established because of oil palm. Interviews with a range of stakeholders including farmers, business community, government officials and fishing communities revealed that there has certainly been increased service provision in the island since the introduction of oil palm.

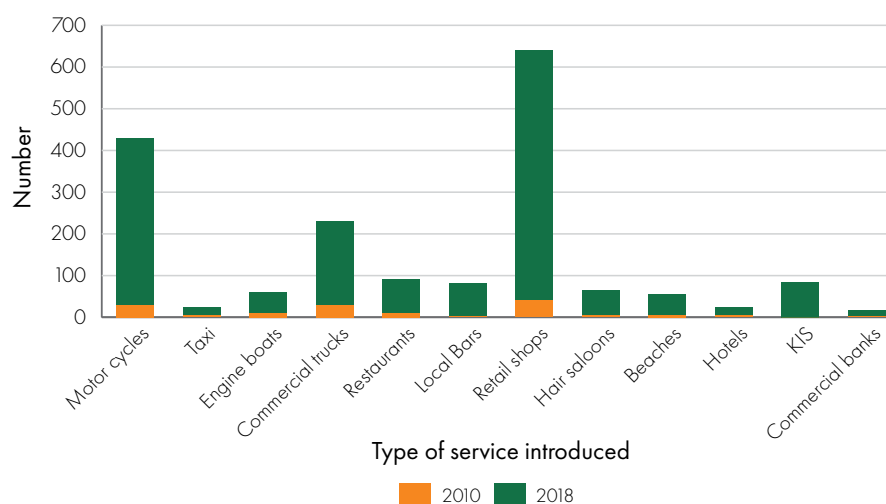


Figure 10: Informal and formal sector growth over 8-year period

Agricultural activities (excluding oil palm)

The major cash crops grown in the island are coffee and rice. According to the Chairperson Coffee Cooperative Company Limited, 2130 are involved in coffee growing but only 899 are registered with the cooperative. According to coffee farmers, an acre of coffee can produce about 3 bags of 100 kgs. Other crops grown include potato, cassava, maize, beans, tomato and pineapple among others. These are mostly grown on a subsistence scale by nearly all farmers including oil palm outgrowers. However, amounts produced depend on family and land size, with most households producing for consumption while a small section less than 20% produce for consumption and sale.

Table 8: Average incomes from oil palm and coffee

	No. of individuals	Monthly income/acre (UGX)	Monthly value per crop (UGX)
Oil palm farmers	1200	300,000	360,000,000
Coffee farmers	2130	125,000	266,250,000

Source: Interviews July 2018, Kalangala

Table 9: Population involved in rice and coffee production in Kalangala

Sub-county	No. of rice farmers	No. of coffee farmers
Mugoye	91	453
Bujumba	66	510
Kalangala Town Council	13	97
Bufumira	259	406
Kyamuswa	155	444
Bubeke	104	205
Mazinga	42	15
Totals	730	2130

Source: interviews with District Production Officer and Reports, July 2018

From the 2014 census (UBOS, 2016), there was a total of 6481 farmers keeping livestock in Kalangala. There has been growing number of livestock as a result of the clearing trees and oil palm growing. Many farmers have started rearing goats and cows that graze in oil palm farms which help maintain the grass, weeds or cover crops down. Other livestock include cattle, pigs, chicken and ducks.

Transportation

Transportation particularly the commercial motor cycles are major beneficiaries of oil palm activities. In Kalangala town council alone, it was estimated that over 400 people are directly employed as motorcyclists and on a daily basis earn UGX 20,000-25,000. In this sector majority are male youth who are riding motorcycles on loans and

only about 35% own the motorcycles. In addition, some oil palm outgrowers have purchased motorbikes to ease transport. Also, there has been increase in number of taxis running two routes from Luuku ferry station to different locations on the main island.

Trade and tourism

Kalangala town council is the central business area for Kalangala and therefore hosts majority of business operating in the districts. There are number of service providers including hotel, beaches, transport groups, fuel stations among others. Interviews indicated that there has been growing trends especially in the transport subsector and small scale business. The growth of this sector has also employed large numbers of women in very small informal business including roadside businesses of all kinds.

Small scale businesses are regarded as key beneficiaries of oil palm. According to Kalangala district commercial officers, at least 400 small scale businesses are indirectly linked to oil palm activities. Small scale operators have greatly increased due to increased population and demand of supplies by OPUL staff and farmers who receive monthly income from oil palm. In Kalangala town council alone, there are 20 small restaurants and 20 hair saloons opened since oil palm began, employing an average of 3-4 workers, 70% being 18-22 year-old women.

There are more than 10 fully operational beaches in Bugala island. The cost of starting beach in Kalangala is quite high and requires a good marketing strategy for beaches to attract clients. There are two types of beaches, high class beaches including Ssesse beach, Brovad and Victoria beach that attract more income compared to low class beaches. For example, Ssesse island beach employs about 25 full time workers while other beaches employ 3-10 employees some as casual workers. Besides beaches that provide services mainly to foreigners and some Ugandans, the number of small restaurants has grown in Bugala due to the higher population. Most are in Kalangala town centre, but some are in trading centres close to OPUL stations and offices, serving OPUL staff but also other visitors or business operators.

Table 10: Average income earned from beaches

Beach type	Estimated monthly income
High class	30- 50+ million
Lower class	7-20 million

Table 11: Population employed and income earned from restaurants in and around Kalangala town

Type of business	No. of businesses	No. of workers	Monthly income per worker (UGX)
Local restaurants	20	60	100,000
Hotels	7	21	150,000

Information obtained from restaurant owners shows that workers are paid UGX 3000-4000 per day, while for hotels, workers are paid UGX 150,000-200,000 monthly depending on the business size.

Banking

At the time of the study, two commercial banks had physical presence in Kalangala, with one more (Centenary bank) in the process of opening a new branch. Stanbic Bank was the first commercial bank to operate in Kalangala. According to the manager, it established before the oil palm project started, mainly serving district civil servants, then KIS, KOPGT and now farmers. From the outset it was not favourable for farmers and the reason when Finance trust came, most farmers registered with them. Currently, the bank serves 549 farmers. In April 2018, the bank introduced a loan facility for farmers and so far 80 farmers have borrowed UGX 600 million repayable in one year, implying that on average each farmer borrows UGX 7.5 million. Finance Trust Bank has a team of ten workers (5 female, 5 male), with only two employees from Kalangala, the rest from outside the district. As of June 2018, the bank had registered about 600 outgrowers saving with the bank, 30-40% are women. According to the manager, women save UGX 30,000-100,000 per month, whereas men save UGX 150,000-500,000 per month.

Infrastructure related employment

At the time of the study, Kalangala Infrastructure Services (KIS) employs 85 employees of whom 38% are natives, 62% and from other districts. Overall, 25% are women. This study revealed that most informal business operators are non-natives, and 70% of those in the business sector are not from Kalangala. However, a few locals are now operating in the outskirts of Kalangala town and other trading centres but with limited capital.

Negative social impacts – issues of in-migration

Oil palm in Kalangala has directly and indirectly created employment for people, but contrary to what was anticipated, that project would benefit the local population, results showed that most employment benefitted those from outside the district. Information obtained from OPUL showed that they employed 1302 staff, 65% men and 35% women, but only less than 10% were native to Kalangala. All top management are men from outside Kalangala, including six non-Ugandan top managers and six senior managers from Uganda but from outside Kalangala. Whereas recruitment is based on merit as per the discussions with OPUL staff and management, measures need to be put in place to at least attract qualified natives into senior management roles to ensure that decisions take into account the concerns and voices of the host community. Of the natives, they are mainly employed in lower positions as casual workers. OPUL employs 115 staff on open-ended contracts but only 7% of natives have such contracts and moreover in lower positions. No natives are in management positions to influence decision making and only 18% of employees are female, whereas empirical evidence that having women in leadership positions is very critical to women empowerment. Having female leaders would be important for promoting specific interests of female employees as well as demanding for favourable gender to benefit not only female employees but also promote equality among outgrower communities.

In all formal employment, results revealed that 86% of formal workers employed are from outside the district. Given challenges that affect the island there were few individuals qualified for the jobs hence most of the employees are recruited from outside the district. In addition, most staff employed is in lower positions and therefore earn less money. Kalangala District Local Government employs about 165 staff at both higher and lower Local governments and about 30% positions are vacant. Currently over 55% of the employees are not natives of Kalangala and only 32% are women. Reason for this varies from lack of technical skills due to the fact that Kalangala has in the past been characterized with poor education performance at all levels. For the case of OPUL, the available literature indicated that at the start of the project, there were too few qualified islanders to meet the demand for labourers (Piacenza, 2012) and there was difficulty in attracting qualified natives who were willing to work and live on the island as most of them preferred working outside the island. According to OPUL and KOPGT, attempts have been made to advertise nationally, but a few natives usually apply and those who apply don't meet the requirements.

Even in non-formal employment activities like fishing and agriculture, small scale trade data from the district departmental heads reveal that majority of the participating individuals are non-native in the fishing business, over 80% are non-native. Meanwhile, of the 1810 oil palm outgrowers, most are from western Uganda. Most who were working as labourers on timber cutting and charcoal burning, bought land since and established families. This also partly explains the population upsurges for 2002 and 2014 accordingly. Therefore, deliberate efforts and strategies ought to be put in place by government and other actors to specifically attract natives into white collar jobs in the district, which are mainly offered by OPUL and a few institutions including banks and other service institutions. Additionally, incentives should be provided to natives with intentions to invest in the district to encourage an equitable share of oil palm revenues.

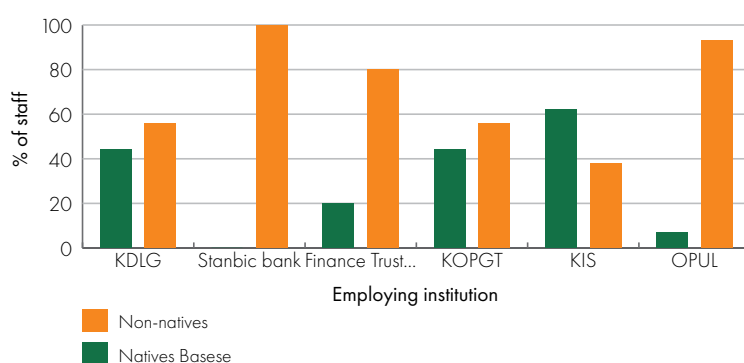


Figure 11: Summary of employing institutions and their staff in Kalangala district

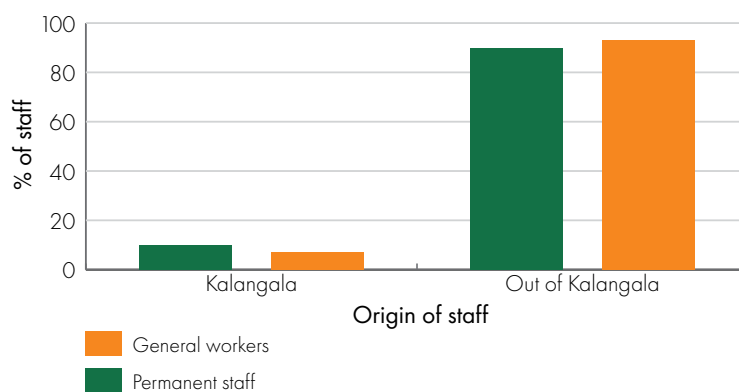


Figure 12: Category of staff in oil palm production by origin in Kalangala

Negative social impacts

HIV - The Central Region where most oil palm investments are occurring has a higher HIV prevalence, estimated at 11% in 2011, with Kalangala having the highest rate in the country at 18%. With growing income in the hands of the farmers, HIV prevalence is likely to increase, affecting the entire district and not only fishing communities. There is therefore a need for concerted efforts from different stakeholders including OPUL, KOPGT and district to design interventions to address this situation. The company does however run internal HIV mainstreaming programmes for staff and OPUL also provides free ARVS to affected staff.

Prostitution - Known to be high in fishing communities, this has also been accelerated by increased incomes from oil palm. Anecdotal reports reveal that the district registered the influx of prostitutes around the same time when KOPGT outgrowers and OPUL workers are paid each month. A number of lodges have come up due to booming business and prostitution is a big issue now. There is need for further research on this so that concrete data is obtained on the magnitude of the problem.

Domestic violence - Whereas poverty is considered the major cause of domestic violence elsewhere in the country, in Kalangala the situation is different. According to the KOPGT manager, domestic violence has increased in many areas because of increased incomes. Men are marrying more wives and have more concubines with family neglect as a result. This is a big problem to the extent that it is likely to impact oil palm production for outgrowers and smallholder farmers who rely on family labour. It was also found that separating couples are demanding a share of oil palm plantations on which they have been working for years.

Land conflicts - These are common in Uganda and tend to increase in areas of economic development and increasing land values, as is the case in oil palm areas (IFAD, 2017). Besides disputes arising from the land acquisition for establishing nucleus estates in Kalangala, there have been a number of cases of land disputes involving outgrowers or intra-family inheritance disputes, especially involving widows and children, further exacerbated by the prevalence of HIV/AIDS. Also, some farmers are growing oil palm on land boundaries, and due to the size of the plants, they shade neighbouring land which then cannot be used to grow other crops.

Buvuma district

Demographics

The district comprises eight sub-counties and one town council which is faced with challenges including the lack of a comprehensive physical plan that results in unplanned settlements, scarcity of safe and clean water, low latrine coverage, and lack of a reliable and sustainable energy supply. In 1991, the national population census estimated the population of Buvuma district at 18,500, increasing to 42,500 in 2002, and 89,890 in the 2014 population and housing census (UBOS, 2016), with 42,476 female and 48,414 male. Similar to Kalangala, more than 70 - 80% of the population is not native to the district, coming to work in fishing and so most do not come with their families (Buvuma DLG, 2013). The steady population growth of 6.25% is one of the highest in the country. On average there are 3-4 people per household. Over 60% of the total population is on the main Buvuma island as it is more conducive for agriculture than the small islands. The main economic activities in the district include fishing, logging and charcoal burning. Livestock farming is also practiced, with most consumed locally. A high percentage

of the population is illiterate with high levels of child labour in fishing. The emerging economic activity is oil palm that was expected to start in early 2019.

Table 12: Segregated population distribution of Buvuma district by sub-county

Sub-county	No. of households	Population 2014			
		Male	Female	Total	%
Bugaya	1,534	2,685	2,185	4,870	5
Busamuzi	3,946	8,305	7,911	16,216	18
Buwooya	2,578	6,549	6,379	12,928	14
Buvuma town council	2,586	5,149	4,713	9,862	11
Bweema	2,808	4,781	3,926	8,707	10
Lubya	2,334	3,483	3,066	6,549	7
Lwajje	1,632	2,580	1,856	4,436	5
Lyabaana	2,608	4,446	2,464	6,910	8
Nairambi	5,155	9,968	9,209	19,177	21
Total	25,181	47,946	41,709	89,655	100

Source: 2014 Population and Housing Census (Uganda Bureau of Statistics; UBOS, 2016)

The oil palm project is planned to occupy almost half of the 22,000 ha of the main island, with 7500 ha of nucleus estates and 3500 ha to be cultivated by outgrowers. The massive population movement that occurred since 2015 has greatly affected the demographics, and the population in the main island has greatly reduced.

About 30% of households on the main island have sold their land and moved, some settling elsewhere on the island but most appear to have purchased land in nearby mainland districts (e.g. Mayuge, Mukono, Buikwe, Jinja and Bugiri Kamuli) or on other islands in the district (IFAD, 2017). Many have apparently indicated their interest in growing oil palm. Others continue to commute to Buvuma and work on land there, and at least some have indicated expectations that they would benefit from employment on the nucleus estate. It is estimated that about 5% of tenants have returned to their areas of origin in districts such as Luwero, Mbale, Soroti, Katakwi and Masindi. Not only has VODP displaced people, but also the livestock kept in the district. In 2017 alone, the district lost more than 13,000 domestic animals due to displacement of farmers.

Employment

Formal and informal employment

Being a new district, there are few institutions providing formal employment, besides local government and related government departments and agencies. The district has a total of 548 staff on the payroll, including local government staff, teachers and health officers. At district level, of the 12 departments, nine are headed by male staff, three by women, and female staff make up only 29% of district workforce.

Table 13: Buvuma district local government staff and origins

Sector	Filled positions	Gender		Origin	
		Male	Female	Buvuma	Out of Buvuma
District local government	90	60	30	26	64
Town council	22	14	8	—	—
Sub counties	84	65	19	—	—
Totals	165	116	49	—	—

Source: Interview with Buvuma District Human Resource officer, July 2018

Besides subsistence agriculture, the availability of tropical rain forests supports timber logging and charcoal production which employs about 5% of the population (Buvuma DLG, 2013). Another growing sector is small scale trade including shops, restaurants, salons, taxis and trucks, salaried employment for civil service and construction, employing 15% of the population in Buvuma. Information from the town council reveals that there are now 150 licensed businesses.

Table 14: Average incomes by job type

Job type	Number of people employed	Average monthly income UGX
Subsistence agriculture	17,978	120,000
Commercial agriculture	5420	420000
Fishing (boat owner)	5298	7,500,000
Fishing crew	53,934	500,000
Fish cage farmers	105	300,000
Small scale businesses	700	70,000
Buvuma DLG	548	300000- 1.500,000

Fishing

Of the adult population, 60% are involved in fishing, and in supporting businesses and services at or around landing sites including bars, restaurants, lodging services, general merchandise shops, drug shops, butchers, food commodity stalls among others. There are 5298 boats in all, but women make up only about 9% of boat owners. Each boat employs a maximum of four people on a regular basis responsible for catching fish and fish net preparation. In addition, over 80% of those involved in fishing in Buvuma are from Busoga, Teso and Bugwere.

Table 15: Number of boats and ownership by gender in Buvuma

Boat ownership	Number of boats	Number of people employed
Fishing boats	5298	21,192
Female boat owners	254	1,016
Male boat owners	2139	8,556
Total owners	2393	

Source: District Fisheries Officer, August 2018

In Buvuma, three main types of fish are commonly caught. Most male boat owners catch Nile perch and most women boat owners concentrate on silver fish. Incomes from fish have reduced by almost 40% in the past five years. Poor fishing habits have greatly contributed to this, and improved transport facilities have caused massive migration of fishermen into Buvuma especially after it was granted district status.

Table 16: Fish types and estimated monthly income

Fish type	Monthly income per boat, 2012 (UGX)	Monthly income per boat, 2018 (UGX)
Nile perch	2,300,000	1,235,150
Tilapia	153,0000	795,400
Silverfish	2,020,500	1,050,000

Source: District Fisheries Officer and production officer reports

As in Kalangala, there is large income inequality between boat owners and fishing crew who operate on a commission basis of between 10-12% per day. On average, a crew member earns a profit of UGX 70,000 per month, and due to the low incomes earned many engage in other economic activities such as farming to supplement their incomes. Cage farming is a fish farming method recently introduced in Uganda. Here a group can harvest 1,500 fish (about 330 kg) which can fetch UGX 1.8 million after nine months.

Agriculture

Subsistence agricultural employs 17,978 people (20%) of the population, with most engaged in fishing (Buvuma DLG, 2013). The growing of perennial, annual and cereal crops is evident on the mainland in addition to subsistence poultry and animal rearing. Originally, people reported they were mainly farmers with the major crop in Buvuma being bananas, but the influx of people from Mayuge and Busoga have introduced maize and upland rice, also livestock farming being done very minimally. Concerning livestock, there has been a significant decline in the number of animals in Buvuma in less than one year due to displacement of people as land is purchased for oil palm.

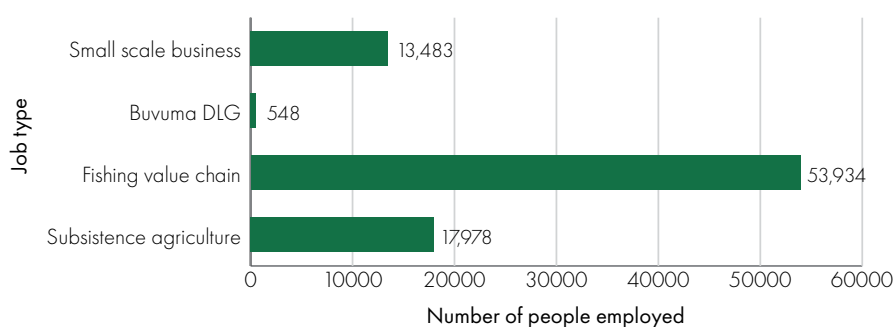
Learning from Kalangala's experience it is anticipated that commencement of NOPP in 2019 will see a population surge in Buvuma as occurred in Bugala, increasing the demand for animal products and food crops.

Table 17: Estimated numbers of livestock kept and displaced by land acquisition by VODPII in 2017

Type of livestock	Animals in season 1, 2017	Animals in season 2, 2017	No. of animals lost in 6 months
Cows	5000	3000	2000
Bulls	450	400	50
Sheep	500	300	200
Goats	15000	10000	5000
Pigs	19500	13500	6000
Total loss			13,250

Source: MAAIF information system for food and nutrition security, Second season 2017. VAM Assessment

Figure 13: Major formal and informal employment sectors in Buvuma



The major cash crop in the island is coffee, harvested twice a year giving farmers an average of UGX 420,000 per month. Other crops such as potato, banana, beans, sweet potato and cassava are grown on a subsistence scale. Due to the price fluctuations especially of maize, farmer incomes are very low, averaging UGX 120,000/acre/month. Between 2011 and 2014, rice was introduced and is now being grown in lowlands. In 2017, about 11,700 ha was being used for small subsistence agriculture, however with 7500 ha bought by VODP and 3500 ha dedicated by registered outgrowers, this leaves less than 2000 ha for food production, so some people have started planting rice in wetlands.

Table 18: Crops grown in Buvuma and their utilization

Crop	Area planted (ha)	Yield (t)	% consumed as food	% sold outside the district
Maize	4,000	8,000	30	70
Rice	1,200	1,920	5	95
Cassava	5,000	20,000	5	90
Banana	1,500	1,800	80	20
Total acreage	11,700			

Source: MAAIF information system for food and nutrition security, Second season 2017. VAM Assessment

Anticipated impacts in Buvuma

The government has secured 6500 ha for a nucleus estate on the main island for oil palm, with about 800 outgrowers having expressed interest, mostly men because women do not usually own land. The project also intends to attract outgrowers from other islands in Buvuma district as well as from neighbouring districts. Of the 22,000 ha, about 4500 ha have been reserved for forest reserve and the remaining land will be used for other crops and roads. It is proposed there will be one oil processing mill plant in Buvuma and another one in Mayuge, where according to the VOPD contact person, 2000 ha has also been set aside for oil palm. According to the district planning unit, the project is expected to lead to improvements in local livelihoods and contribute to the local district economy. Interviews with the Planning Unit reveal that the district should be able to earn about UGX 50 billion annually once

the project takes off, dwarfing the UGX 10 billion the district receives from the central government. The project is expected to begin in 2019, but may be delayed as not all land has been secured as expected.

At the time of the study, VOPD had two full time and one part-time staff to facilitate land clearing and processing in Buvuma before it can be handed over to OPUL. VOPD staff work closely with a private security company which is helping to enforce compliance amongst those who refuse to leave after selling their land. In addition, OPUL recruited two agriculture extension officers from Buvuma district and are currently in Kalangala for project orientation and familiarization.

Only 30% of interviewees in Buvuma were very optimistic about the oil palm project and the expected increased employment and incomes, with 70% having mixed feelings as to what extent the project will benefit the communities and the district itself. In contrast, most district technocrats and political officials were optimistic about the impending project. Throughout the interviews, it was evident that the communities feel that those who sold their land did not benefit as was expected and they had to figure out a new life amidst meagre resources that were paid to them as compensation. In addition, there were reports of high level of family breakdowns and neglect. Men sold off land and concluded all negotiations without involving their spouses. Money paid to them was spent, some went to Mukono where the money was paid from and never came back, while others came back empty handed. This alone became a source of family conflicts and family breakdown. At the moment, there is also massive opening of land, which has been vacated due to anticipated oil palm, and the district food security report also reports decline in production not only for food but also animal production.

General conclusion and recommendations

The introduction of oil palm in Kalangala contributed to a growing population in a formerly underpopulated and undeveloped area, rising by more than 40% between 2002 and 2014, with non-natives comprising more than 70% of the total labour force, more than 80% of oil palm outgrowers, and more than 90% of OPUL staff. Amongst outgrowers 37% are women, there being a gradual increase over time, but they have smaller plots compared to men. Economic benefits began when harvesting started in 2010, but participation was entirely facilitated by loans from IFAD which enabled them to clear land, hire labour and purchase inputs.

Reports from KOPGT show that oil palm growing provides a stable income of about UGX 1.2 million a month to outgrowers if plantations are well maintained. IFAD will withdraw support for outgrowers on Kalangala in 2019 as it directs attention to the new Buvuma oil palm project, but that only 50% of oil palm in Bugala has reached harvesting stage means that there is likelihood that output for outgrowers will decline and outgrowers will not realize the intended benefits. This is likely to disproportionately affect women given their low economic status, so KOPGT should be supported to exercise their mandate including developing a clear monitoring mechanism to see that outgrowers continue to benefit from oil palm.

The introduction of oil palm in the short term has increased incomes for farmers who now earn monthly income but this has aggravated gender-based violence and destabilized homes. It's most likely that the 'do no harm' approach and responsive interventions were not considered in the project design. The high population influx also creates competition for resources and aggravates land-related conflicts as there is limited land for crop production also causing over cultivation and poor yields that cannot meet local demand for food.

Also visible is high income inequality. Both in the fishing and oil palm sectors, there are two categories; those that are earning well and those earning poorly. There is high wage difference between boat owners and fishing crew. There is capital outflow, that the populations that earns more in Kalangala comes from outside the district and therefore do not investment in the area where the income is earned. Similarly, with many absentee oil palm outgrowers, incomes are being invested in areas other than Kalangala, creating further poverty as services are not readily provided.

In Buvuma, it is likely that oil palm will become the largest revenue source. But lessons from Kalangala point to the fact that with reduced land for subsistence agriculture, the quantity of food crops produced will reduce, and expected incomes from oil palm may be spent on food. Displacement of people has contributed to an increase in domestic violence and family neglect, with women and children often the victims since land belongs to men. This has resulted in many cases of family abandonment.

The study explored a number of issues regarding population dynamics employment levels and economic value of each employment sector. The information obtained is useful for the oil palm industry to take appropriate action to respond to the existing gaps.

Recommendations

Oil palm has been produced in Kalangala for over 12 years, with many lessons learned. But to ensure mistakes are not repeated in Buvuma where planting is yet to begin, actions are needed by the government, donors and BIDCO.

1. The government and donors must commit to gender issues, and undertake gender impact assessments prior to introducing oil palm. The National Oil Palm Project should engage the Ministry of Gender and the Equal Opportunities Commission to advise on appropriate gender mainstreaming actions and ensure related mitigation actions are developed, implemented and monitored.
2. The government should make clear to communities the unintended consequences of oil palm development, including positive/ negative aspects of in-migration, and try to minimize the impacts. This must be done prior to starting projects, with women, men and youth part of sensitization programmes.
3. The government should put in place a quota system for the employment of local people, to ensure that there is good representation of locals (Islanders) in different work opportunities that are/will be created.
4. Undertake further studies to assess growing inequalities regarding plantation ownership, and make recommendations on how to limit elite and corporate capture in oil palm landscapes. The government should also recommend minimum areas for smallholder oil palm plantations to be viable.
5. The government should develop a comprehensive plan including land-use law and resettlement action plans, in advance of the now expected population movements into new oil palm growing districts.
6. The government should fast track implementation of the recently passed minimum wage law, and develop tracking and compliance mechanisms to address worker exploitation and wage inequalities.

References

- Buvuma DLG, 2013. Buvuma District Local Government District Development Plan 2015/16 – 2019/20. The Uganda Economic Update report, Kampala, Uganda.
- Kalangala Infrastructure Services Profile 2018.
- KOPGT Credit Report June 2018.
- Ministry of Agriculture, Animal Industry and Fisheries Uganda Information System for Food and Nutrition Security (ISFNS) Second Season 2017 VAM Assessment.
- Piacenza, C., 2012. Negotiating gendered property relations over land: oil palm expansion in Kalangala district, Uganda. Wageningen University, the Netherlands.
- Republic of Uganda, National Oil palm Project, Final Design Report 2017
- Ssemmanda R. and Opige M.O. (eds.) 2018. Oil palm plantations in forest landscapes: impacts, aspirations and ways forward in Uganda. Wageningen, the Netherlands: Tropenbos International.
- Uganda Demography Health Survey 2016
- UBOS, 2016, The National Population and Housing Census 2014. Uganda Bureau of Statistics, Kampala, Uganda.
- World Bank 2015. Impacts of large scale land-based investment, implementation challenges, and policy implications: Lessons from the Uganda Oil Palm Project. World Bank Conference on Land and Poverty. The World Bank, Washington DC, 23-27 March 2015.