

ORIGINAL RESEARCH PAPER

Economics

CHALLENGES AND COPING STRATEGIES OF OIL PALM CULTIVATORS IN MIZORAM NORTH EAST INDIA

KEY WORDS: Oil palm cultivation, challenges, constraints, perception, rural livelihood

K. Vanlalhruaizela

Faculty, ICFAI University Mizoram

The present study probed into the challenges and coping strategies of oil palm cultivators in rural Mizoram. The perception of farmers on oil palm promotion in the state was also assessed. A multi stage sampling procedure was followed to select, blocks, villages and households. Four villages from two districts were selected based on the leading producers of oil palm. The study found that although oil palm cultivation has significantly contributes to rural income there were different challenges and constraints faced by the farmers. To cope with these the challenges, oil palm farmers adopted different coping strategies to minimize their challenges. However, due to lack of livelihood options, majority of these farmers still perceived that oil palm cultivation must be promoted in the state due to its fertility and available market. The paper offered suggestions for different practitioners who are concerned with oil palm promotion and rural development.

1.INTRODUCTION

Oil palm also known as *Elaeis guineensis* is a tropical forest palm native to West and Central Africa and has been promoted by different countries around the world. It has been a significant source of livelihood and evidence showed that for sustainable livelihoods, oil palm cultivation has created a high social and economic value [2]. The cultivation of oil palm is an important source of poverty alleviation and provides a significant livelihood activity through both 'farming-based' and 'migration-based' strategies [12]. However, there are number of negative social impacts that include land tenure conflicts, the loss of tenure or access rights and other conflicts resulting from migration of employees and exploitative labour conditions besides environmental impact [5]. Globally, the total productive area of oil palm cultivations is 9.1 million hectares of which 4.5 million hectares is in Indonesia and 3.8 million in Malaysia. In the year 2007-2008, the overall production of oil palm in the world was around 41.1 million tonnes [10].

In India, Technology Mission on Oilseeds and Pulses (TMOP) was set up in 1986 by the Ministry of Agriculture, Government of India to promote oil palm cultivation. The Minimum Support Price (MSP) also covered oilseeds in the country. The government fixed the rate for oil palm Fresh Fruit Bunches (FFB) under certain conditions. About 36,000 metric tonnes of crude palm oil is produced in the country. Although the government promotes oil palm cultivation, a large number of oil palm was uprooted by the farmers. This happened mainly during 2001 to 2003. The uprooting was due to low prices of oil palm fruits and farmers immediately responded to the decrease in income. They switched oil palm with other crops and vegetables. The shift in government policies to promote import of oil palm affected the domestic palm oil sector which was benefiting from the increased domestic oil palm prices. The promotion of oil palm cultivation is still ongoing which is focused in different states [3].

In the context of Mizoram, the geo-climatic condition is favorable for oil palm cultivation. A potential area for oil palm cultivation of 61,000 hectares was identified by a committee headed by K.L. Chadha. Another committee was formed later headed by Dr. P Rethinam which identified another potential area of 40,000 hectares with a total of 1,01,000 hectares potential area for oil palm cultivation in Mizoram. The first plantation started in Rotlang, Lunglei District and Thingdawl, Kolasib District in 1999-2000 with 5,000 and 7,000 seedlings respectively with promising results in the state. To promote oil palm cultivation in the state, The Ministry of Agriculture & Cooperation has sanctioned Oil Palm Development Programme under Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM) since 2005-2006 to promote oil palm cultivation at the cost sharing of 75:25 between Central

and State Government till 2011-2012. The programmes of Rashtriya Krishi Vikas Yojana (RKVY for Oil Palm Area Expansion) and National Mission on Oilseeds and Oil Palm (NMOOP) were also implemented in the state. The state government also passed The Mizoram Oil Palm (Regulation of Production & Processing) Act, 2004 in the Legislative Assembly on 2nd December, 2004 which contains 26 sections. Under the Act, an agreement was signed with three companies for Oil Palm Development. Currently, Godrej Agrovet Ltd is operating in Bukvannei, Kolasib district which plays an important role in supplying planting materials to the farmers and buying the oil palm fruits from the farmers. Besides these, the state scheme i.e. New Land use Policy (NLUP) has also identified oil palm cultivation as one of the crops to be cultivated under the programme. However, there are many challenges and constraints faced by oil palm cultivators in the state.

2. Overview of Literature

There are copious literatures on oil palm cultivation and is being studied by different disciplines around the world. Most of these studies focused on Malaysia and Indonesia as they are the leading producers of oil palm. Some literatures on the challenges and constraints of oil palm cultivation are highlighted in this paper.

The constraint of oil palm production in central Local Government Area of Osun State, Nigeria was examined [8]. The study found that land is the major factor limiting oil palm cultivation. Problem in funding, lack of information and unfavorable climatic conditions were also faced by the farmers.

A study in Johor [11] revealed that land ownership status, capital inputs; flow of information and the need of balancing with other crops were the challenges faced by smallholders of oil palm. Social challenges mainly of security and legitimacy of their land holdings, labour availability and effects on wider communities were also identified.

In [6] conducted a study on the plantation and production of oil palm among contract growers in the states of Andhra Pradesh and Tamil Nadu, India. The study concluded that although farmers benefitted from the schemes, there were still some challenges like pest infestation of fruit, water stress and lack of fund. Stock point of fruits was also far from the land which was also a problem for the farmers.

The problem and prospects of commercial small and medium scale cocoa and oil palm production in Cross River State, Nigeria was studied [9]. The study revealed that low yielding varieties, limited land for cocoa and oil palm cultivation, high cost of establishing nurseries and plantations, high cost of

labour, unavailability of skilled and unskilled labour, fluctuations in market prices, lack of market information, spoilage and low quality products were the constraints being faced

A paper by [7] addressed some of the important issues oil palm cultivation in the state of Andhra Pradesh, India. The paper stated that even government supports oil palm cultivation there are still various challenges like low productivity, price fluctuations, insufficient processing facilities and lack of suitable technologies.

A study [1] assessed oil palm marketing in Dekina Local Government Area of Kogi State, Nigeria and identified that price fluctuation, inadequate capital and too many retailers were the main constraints in the region.

Lastly, in [6] stated that majority of oil palm farmers in Ethiopia East Local Area of Delta have inadequate capital to expand their cultivation which was followed by weak market facility, high cost of transportation, instability of price and others.

The overview of literature shows that there are different challenges and constraints in oil palm cultivation across different regions. These include problems regarding land ownership, transportation, technical knowledge, inefficient market system and lack of capitals. Thus, literature helps us in identifying and understanding the theoretical, conceptual, operational and methodological issues in the study of oil palm cultivation and rural livelihood.

3. Statement of the Problem

The present study tries to probe the challenges and constraints faced by oil palm cultivators in Kolasib and Mamit districts, Mizoram. The copings strategies adopted by these farmers were also identified. Further, the perception of oil palm cultivators on the promotion of oil palm cultivation in the state was also assessed. The findings of the study will be useful for policy makers, planners and voluntary organizations at multilevel who are concerned with oil palm cultivation and rural livelihood promotion. It will develop better understanding and direction for different developmental workers.

With this regard, the objectives were to:

- To probe into the challenges and coping strategies of oil palm cultivators in rural Mizoram.
- 2. To assess the perceptions of oil palm farmers towards oil palm promotion in Mizoram.

4. Study Areas

The two districts selected for the study are Kolasib and Mamit districts in Mizoram. These two districts are the leading producers of oil palm in the state. It is also the only area where oil palm industry was set up in the state. Under the total area identified for oil palm cultivation in the state, the two districts accounts for 55.83 percent of the total area of cultivation. It was identified that the potential area for oil palm cultivation in Mamit district is 18500 hectares while it is 17350 hectares in Kolasib district. From both the districts, it was recorded that the total purchase amounted to 8,742 metric tonnes till 2014. The extraction of palm oil was started itself in this year. From 2014-2015, a total quantity of 5,718 metric tonnes was procured out of which 5,500 metric tonnes was processed in the mill for extraction of Palm Oil. There is Price Fixation Committee under the state Oil Palm (Regulation of Production & Processing) Act, 2004 to fix the rate of Fresh Fruit Bunch. Presently, it is fixed at Rs. 5.50 per Kilograms and the price of the exotic seedling is Rs. 85.00 while that of the indigenous is Rs. 65.00 per seedling. From these districts, Khamrang and Buhchangphai villages of Kolasib district and Tuidam and Nalzawl villages of Mamit district were selected for the study. These villages are the leading producers of oil palm in the area.

5. Methodology

The study was cross sectional in nature and descriptive in design. It is based on the quantitative data collected through pretested, structured household interview. Unit of the study was households and all the rural households in Kolasib and Mamit districts Mizoram constituted the population. A multi stage sampling procedure was followed to select, blocks, villages and households. Kolasib and Mamit districts were purposively chosen and a representative blocks were chosen from the districts based on the concentration of oil palm cultivators. From the selected blocks, two villages were chosen in both the districts based on the geographical location; one distant and one proximate village from the district headquarter. These villages were also among the leading producers of oil palm in the region. In each of the selected villages, systematic random sampling was used to select oil palm cultivators. The overall sample size of the study was 144 households.

6. RESULTS AND DISCUSSIONS

1. Challenges and Constraints of Oil Palm cultivators

In pursuing their livelihood activities, people face obstacles and constraints which hinder their social and economic growth. The present study identifies the challenges faced by rural households relating to oil palm cultivation. In the study, the main challenges and constraints identified were transportation problem, low price of fresh fruit bunch, huge investments, eaten by animals, lack of government support, trees management and lack of manure and irrigation. The numbers and types of challenges faced by household differ from one another. Out of the 144 households surveyed, transportation problem was the main challenge (86%) described by 124 households followed by low price of fresh fruit bunch described by 119 households (83%). Huge investment was described by 98 households (68%) and trees management was described by 96 households (66%). Lack of manure and irrigation was described by 93 households (65%) and eaten by animals was described by 52 households (36%). The remaining lack of government support was described by 32 households (23%).

With regard to transportation problem, the respondents described that road conditions is very poor and some of the lands were not accessible by road transportation. This problem was heightened during rainy seasons and transportation of fruit was done by head load most of the times. The stock point of fruit was also far from the land in which they have to transport it by their own expense. Most of the farmers hired vehicles to transport their fruits to stock point which was very expensive for these farmers. Regarding low price of Fresh Fruit Bunch, the price of fruit was Rs. 5.50 per Kg during the survey. Most farmers responded that the price fixed was too low as compared to the investments made by them. These investments were in the form of labour, time and money which is another challenge for these famers. The trees management is also a problem for most of the farmers during pruning and harvesting. This is mainly due to the thorns in the trees which is unsafe to touch during the process. The fruits were also eaten by wild animals in which some farmers put poison in their land which is a great concern. The other challenges were lack of support from government and lack of manure and irrigation. Most farmers perceived that it is the duty of the government to supply the inputs required as they are the one who promotes oil palm cultivation in the state.

2. Coping Strategies Adopted in Face of Challenges

People used different behavioral and psychological responses to minimize stress and challenges that are called coping strategies. The coping strategy adopted by oil palm farmers was assessed. The main coping strategies identified were hiring vehicles and head load, work harder and employing labour, praying; seek support from government and traditional practices of protecting crops. On the whole, the main coping strategy adopted was praying which was

described by 139 households (96%). This was not peculiar in the state of Mizoram where majority of them are Christian. This was followed by hiring vehicle and head load described by 109 households (76%). A total of 97 households (67%) work harder or employed labour to cope with challenges and another 76 households (53%) seek support from government to minimize their challenges. A traditional practice was also used by 75 households (52%) to cope with their challenges in oil palm cultivation. These traditional practices were mainly used for protecting oil palm fruits from wild animals as well as to keep them away from oil palm thorns during pruning and harvesting periods.

3. Perceptions towards oil palm promotion in Mizoram

Although all oil palm farmers in the study areas faced some form of challenges, majority (83%) still responded that oil palm must be promoted in Mizoram. The main reasons described were available market, fertile in the state, generate employment and supplements income. This may be due to the low level of livelihood diversification in the state and the predominance of agriculture. However, the remaining 17 percent perceived that oil must not be promoted any longer due to the challenges and constraints as mentioned earlier.

7. CONCLUSION

Oil palm cultivation is being promoted by different countries around the globe to alleviate poverty and augment income. The government of Mizoram also introduced various schemes and programmes which is yet to be more successful in the future. However, oil palm farmers in the state faced different challenges and constraints that include transportation problem, low price of fresh fruit bunch, huge investments, eaten by animals, lack of government support, trees management and lack of manure and irrigation. To cope with these the challenges, farmers adopted different coping strategies which have been minimizing their challenges.

8. Suggestions

In the light of these, the study offered suggestion for policy makers, planners and voluntary organizations who are concerned with oil palm promotion. Firstly, livelihood capitals must be promoted among oil palm cultivators to strengthen their assets as oil palm cultivation requires huge investments in different dimensions. Secondly, infrastructural facilities were inadequate in terms of road, market and storage facilities which hold back the development of oil palm cultivation in the regions. Oil palm fruit stock point was also far from the land which is a problem for the cultivators especially during rainy seasons. Therefore, infrastructural facilities must be improved to mitigate the problems and ensure sustainable oil palm cultivation. Thirdly, the existing schemes and programmes must be studied to identify the loopholes in the implementation. This will enhance the effectiveness of these programmes in promoting sustainable livelihood and oil palm cultivation. Lastly, credit linkage and supply of inputs must be taken into consideration as the income of oil palm farmers is still very low to sustain their livelihood.

REFERENCES

- Ibitoye, Jimoh S. Economic analysis of palm oil marketing in Dekina local government area of Kogi state, Nigeria. Asian Journal of Social Sciences, Arts and Humanities. 2014;2(1).
- Laschinger C. Sustainability and Social-Ecological Systems Navigating Oil
 Palm Cultivation and Sustainable Livelihoods A Case Study in Karaket SubDistrict, Nakhon Si Thammarat Province, Thailand, Lund University Master of
 Science in International Development and Management. 2013.
- Manoharan TR. Oil Palm Sector In India, The Scope of influencing Business and Industry to Reduce India's Ecological Foot print in South East Asia. WWF-India. 2015. http://www.awsassets.wwfindia.org/ downloads/palm oil study in India a_report.pdf, Accessed on 05/08/2015 at 12:06 p.m.
- McCarthy J. Processes of inclusion and adverse incorporation: Oil palm and agrarian change in Sumatra, Indonesia. The Journal of Peasant Studies. 2010; 37(4):821–850.
- Owolarafe OK, Arumughan C. A Review of Oil Palm Fruit Plantation and Production under the Contract Growers Scheme in Andhra Pradesh and Tamil Nadu States of India. International Commission on Agricultural Engineering-The CIGR E-journal. 2007;4(9): 1-18.
- Rao VN. Oil Palm Cultivation in Andhra Pradesh State A Study of the Problems and Prospects, Indian Journal of Applied Research. 2013;3(7):339-401.

- Soyebo KO, Farinde AJ, Dionco-Adetayo ED. Constraints of Oil Palm Production in Ife Central Local Government Area of Osun State, Nigeria. Journal of Social Science. 2005; 10(1):55-59.
- Ugwu DS. Problems and Prospects of Commercial Small and Medium Scale Cocoa and Oil Palm Production in Cross River State, Nigeria. Journal of Applied Sciences Research. 2009;5(7):827-832.
- USDA. Oilseeds: World markets and trade. United States Department of Agriculture DataPublications.aspx. 2008. http://www.fas. usda.gov/psdonline/psdDataPublications.aspx.Accessed31Oct.2008.
- Vermeulen S, Goad N. Towards better practice in smallholder palm oil production, Natural Resource Issues Series No. 5. International Institute for Environment and Development. London, UK. 2006.
- 12. World Bank. World development report: Agriculture for Development. 2007.

140