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منظمة الأغذية  
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联合国  
粮食及  
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Food  
and  
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Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных  
Наций

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## COMMITTEE ON COMMODITY PROBLEMS

### INTERGOVERNMENTAL GROUP ON BANANAS AND TROPICAL FRUITS

#### FIFTH SESSION

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**SUPPORTING THE FORMATION OF SMALLHOLDERS  
ORGANIZATIONS, QUALITY IMPROVEMENT AND CREDIT  
AVAILABILITY TO ENHANCE SMALLHOLDER CONTRIBUTION  
TO VALUE ADDITION ALONG THE VALUE CHAIN**

**SUPPORTING THE FORMATION OF SMALLHOLDER ORGANIZATIONS, QUALITY  
IMPROVEMENT AND CREDIT AVAILABILITY TO ENHANCE SMALLHOLDER  
CONTRIBUTION TO VALUE ADDITION ALONG THE VALUE CHAIN**

**I. INTRODUCTION**

1. Value chains describe the sequence of processes required to transform a raw product to its consumable form. It involves various inputs along the chain such as materials, information, logistics and players carrying out specific or multiple activities to produce the end product. The value chain is also characterized by relationships between the players, especially between buyers, producers and those providing the services, which may result in inequitable share of income. The value chain analysis approach is used to show the various linked activities, weakness and strength of the different activities and identification of interventions needed to improve chain performance.
2. Smallholders income are affected by traditional market systems, low quality produce, lack of market access, institutional environment and credit facilities. Hence, quality improvement, availability of credit facilities and formation of smallholders' groups or cooperatives are among factors that have been identified can enhance smallholders' participation in the value chain.
3. Some examples of smallholders organizations in Asia are compared to illustrate the benefits or constraints of farmers groups in enhancing their participation, especially their role in product quality improvement and market access.

**II. EXAMPLES OF SMALLHOLDERS ORGANIZATIONS**

4. Smallholders organizations are effective in facilitating procurement or supply of inputs, scheduling production, provide opportunity to market access and financial assistance. Organizations such as cooperatives are also recognized as a major player in the value chain.
5. Example 1: Accessing market through quality improvement by clustering Mango smallholder groups in Thailand

In 2008, Thailand was the third largest exporter of mango in Asia. The market includes the EU, China, Middle East, South East Asia and Japan. The market for mango in Japan is very lucrative, however access can be challenging due to stringent import regulations and consumer preferences. Requirements include vapor heat treatment before export, optimum quality and size and chemical levels within the minimum residual level limit (MRL). Seasonal production of mango was also an issue for growers in Thailand.

6. A program to increase market access for mango to the Japanese market was implemented in Thailand by establishing mango cluster groups. The mango cluster groups comprise cooperatives or community business groups, exporters, chemical companies and government

agencies. There were altogether twenty cluster groups involved in the production and export of mangoes.

The groups were managed by committees whose tasks were to:

- a. Organize production schedule to meet exporters' orders
- b. Arrange bulk purchase of chemical direct from chemical companies
- c. Organize members for training on field management, post harvest handling, chemical application and the use of permissible chemicals by agricultural experts.
- d. Decide on shared input resources such as field packing facilities

7. The Department of Agriculture Extension was involved in the promotion and training of farmers on Good Agricultural Practice, fruit fly management and provides facilities for vapour heat treatment (VHT). The Department of Agriculture was involved in research and development related to mango production during the off season using the chemical, paclobutazol, farm cultural techniques, introduction of a new mango variety and the establishment of 'one stop service centers' to monitor MRL levels for exports to Japan.

8. Inputs by the exporters included testing samples produced by the growers for MRL's at the 'one stop service centers, and provide information on chemical applications on the different growth stages of the plant. The chemical companies support was in providing information on permissible chemicals, application techniques and facilitating bulk purchases.

This holistic approach of cluster groups resulted in :

- a. Better culturally managed and more productive farms
- b. Better quality mangoes produced – less blemishes, better color and shape due to fruit wrapping
- c. Almost whole year round production of mangoes with the use of paclobutazol
- d. Decline in cases of MRL infringements
- e. More Grade A mangoes being produced due to fruit thinning, proper pruning and fruit wrapping. Grade A mangoes command 30 – 40 better price than Grade B mangoes
- f. Increased market access and mango exports to Japan
- g. Growers are able to reinvest with the earnings

9. The success of the cluster approach in Thailand can be attributed to:

- a. The involvement of major players in the value chain as part of the cluster groupings
- b. Dedicated group committee members and regular meetings with the stakeholders
- c. The strong support in extension, research and development and common facilities by the Government
- d. Support by the industry players such as exporters and chemical companies in providing information on market restrictions and training.
- e. The approach in determining production according to market needs.

10. Example 2 : Facilitating exports of pineapple through quality improvement and certification by pineapple groups in Indonesia

This project involved seven group farms consisting of between 114 – 117 smallholders planting the 'smooth cayenne' pineapple variety in the Subang District, Bandung, West Java, Indonesia.

Issues in the project area were low productivity, inconsistent production, lack of post harvest handling techniques and facilities and lack of quality fruits for the export market.

11. Two pilot farm groups were selected with the support from the Department of Horticulture, a University and an exporter. The interventions for the project were:

- a. On farm training by the Department of Agriculture on Good Agricultural Practice (GAP), Standard Operating Procedures in agronomic practices, post harvest handling and the production of safe and quality fruits.
- b. Provide postharvest facilities to carry out sorting, grading, precooling and packing operations, in collaboration with the local Agricultural Office.
- c. Complement the smooth cayenne variety with another export variety
- d. To facilitate market access to export markets
- e. Processing of pineapples into juices and other products to increase farm income

The project had succeeded in:

- a. Registration of one hundred and thirty five smallholders under Indo GAP certification.
- b. The MD2 variety was introduced to complement the local 'smooth cayenne' variety
- c. The smallholders had established direct links with the exporter. Exports to Korea began in 2009.
- d. The exporter played a major role by providing training and facilities to sort, grade and pack the fruits for export.
- e. The smallholders were paid better prices for quality fruits averaging Rp 2500 / kg per fruit, which was an estimated 20 – 30 percent more.
- f. Expanding the home processing activities for pineapple for the smallholder family.

12. The strength of this project was the strong community spirit in the smallholders groups, which made it possible for group activities in farm operations and training. The smallholders had managed to export their fruits to Korea, however, easier access to credit facilities would be required to expand and sustain production.

13. Example 3 : Umbrella organization for banana cooperative farming in the Philippines

The Philippines is the largest exporter of banana in Asia. The banana industry is a matured industry in the Philippines with the involvement of multinationals dominating the production and export of the fruit to Japan, the Middle East, Korea, China and Iran. Banana growers in Philippines belong to different categories such as contract smallholders grower, non contract

smallholder, small and medium size companies, banana cooperatives and multinationals / companies.

14. Federation of Agrarian Beneficiaries Banana-Based Cooperatives (FEDCO), was established in 1999 to serve as the umbrella organization for banana growers' cooperatives. FEDCO presently has nearly 20 member cooperatives with around 3,600 farmers owning 5,000 hectares of land.

It was also set up to mitigate problems associated with contract farmers who did not benefit from contract farming, as a result of low prices offered by traders.

15. The benefits obtained by the growers in the cooperatives were

- a. Through this umbrella cooperative, banana growers enjoyed better control of their operations and were able to negotiate the selling price of their produce, based on market demand and the quality of their crops.
- b. The cooperative assisted in accessing market for its member cooperatives via their links with buyers in China, Korea, Japan and the Middle East. As an example, with the elimination of the traders, on the average, a cooperative member on a 3 ha farm and producing 100 – 350 boxes per week can earn an average price of USD 4.50 per 13.5 box, compared to what he received being an independent contract grower.
- c. Packing center built by the umbrella cooperative
- d. The umbrella cooperative provided services such as quality inspection, disease monitoring and transportation

Another arrangement is the direct sale of farm sorted, graded and packed bananas which are sold direct to a selected multinational exporter. This is the case where the multinational company assists the cooperatives by certifying the farm packing house and carry out farm inspection to ensure fruits supplied are of good standards and quality.

### **III. SUMMARY OF OBSERVATIONS**

16. The situation of the banana growers in the Philippines is totally dependent on the cooperative as compared to the situation in Indonesia and Thailand

Some common features of the smallholders organization in the examples are:

- a. All the farmers groups are a coalescence of smaller groups. As such more smallholders were involved in this process.
- b. All the groups were export and market oriented.
- c. The smallholders groups recognized the fact that quality assurance was important for better prices
- d. The private sector was involved in providing market access to the export market
- e. Facilities such as packing centers were provided by the Government or the cooperatives
- f. Training and extension services were carried out by the Government, private sector or cooperatives

- g. With the formation of cooperatives or farmers' groups, the participation of the smallholders in the value chain was at different degrees of involvement. It ranged from selling direct to wholesalers/exporters, thus avoiding the middlemen or traders, to packing activities and supplying direct to exporters.
- h. The dominant players in the chain were the exporters
- i. Certification for good agricultural practice and certified packing premises were central to better market access
- j. There was room for negotiation between cooperative members with buyers / exporters in contractual agreements
- k. The more the interaction between players in the industry, the more the benefits for smallholders.

17. Features that were unique for the smallholder groups:

- a. Availability of financial assistance still a constraint especially in the Indonesian model.
- b. The banana industry in the Philippines was private sector driven, thus Government involvement was minimal. Besides multinationals and companies, the cooperatives' role in developing the industry was significant.
- c. Sustainability of production and exports would be affected, especially if the smallholders had no access to credit facilities

#### **IV. CONCLUSION AND RECOMMENDATION**

18. The purpose of value chain analysis is to identify gaps and recommend interventions to strengthen the chain. The chains can be strengthened by promoting consultation among all players. This was evident in the Thailand model where the smallholder organizations were clustered together with the involvement of major stakeholder including the growers, exporters, government agencies and chemical suppliers. There was also a strong presence of the government in ensuring smallholders needs were taken care off. The program was well coordinated with each player playing their role to strengthen the chain which, in turn were beneficial to the smallholders.

19. There are still challenges faced in developing countries to improve the smallholders situation through the value chain approach. Formation of smallholders organization is a prerequisite for a strong chain, together with other important factors including the involvement of government in providing infrastructures and training, financial institution to provide credit facilities, exporters to advice on quality standards and meeting the requirements of consumers and the market. There is also the long term challenge of sustainability of the initiative.

Different situations require different interventions and recommendations. Workshops to discuss the value chain approach for specific crops are one way to analyze the gaps, recommend interventions and propose interactions by the players.

20. International Tropical Fruit Network (TFNet) has organized workshops in Asia and Africa on the enhancement of smallholders' participation in the tropical fruit value chain, including market

access. TFNet also has the capacity to implement projects in developing countries on smallholder integration into markets for tropical fruits using the value chain approach.