ESTABLISHING A PRO-POOR VALUE CHAIN OF LONG PEPPER (*PIPALI*) IN FOR INCREASING HOUSEHOLD INCOME IN KORAPUT, ODISHA

[1] Bibhu Santosh Behera,Post Doctoral Fellow-cum-D.Litt Research Scholar,LIUTEBM University,Lusaka,Republic of Zambia
2 Priya Ranjan Sahoo,PhD Scholar,LIUTEBM University,Lusaka,Republic of Zambia
3 KSS Rakesh,Director,SoIP,LIUTEBM University,Lusaka,Republic of Zambia
4 Patrick Kalifungwa, Hon'ble Vice-Chancellor,LIUTEBM University,Lusaka,Republic of Zambia
Email:-bibhusantosh143@gmail.com

ABSTRACT

Piper longum commonly known as Indian long pepper or Pipali is an aromatic climber plant with important medicinal properties. Due to its highly regenerative nature, it is quite easy to grow in areas with warm climate and moderate to high rainfall. In Koraput district of Odisha, certain communities have been cultivating Pipali for almost last 10-15 years. However, due to lack of a larger market, price information and technical know-how, they are being exploited by the local traders and devoid of genuine prices for their produces. This paper focuses on the farmers of a village named Chiliba in Ballel GP of Lamtaput block. It attempts to identify the various problems faced by the Pipali farmers and how these issues can be tackled by establishing a pro-poor value chain for the product. The communities in Lamtaput district are planned to be mobilized into community institutions and brought under the DAY- NRLM fold. Under the Mahila Kisan Sashaktikaran Pariyojana (MKSP), a project has been launched to provide support to the Pipali farmers of Lamtaput and involve the tribal youth as Community Resource Persons (CRPs) who shall be trained on agricultural and marketing techniques to provide handholding support to the Farmer Producer Organisations (FPOs).

KEYWORDS: Medicinal Plant, Value Chain, Market Linkage, Producer Group, Farmer Producer Organisations (FPO).

INTRODUCTION

Pipali is considered to be an important medicinal species for manufacturing Ayurvedic medicines for digestion, rejuvenation, respiratory purposes with huge demand in national markets. Some of

the villagers of Chiliba village in Lamtaput block of Koraput district started cultivating Pipali in small patches around 10 years under the instructions of the workers of a local NGO named Asha Kiran Society. Pipali is an annual crop with high regenerative properties and thus it is easy for the farmers to grow subsequent cycles of the crop after harvesting. The farmers leave some of the harvested roots back in the field which in turn regenerates into a new plant. However, for the first three years, there isn't any income from Pipali cultivation. The farmers had to be dependent on inter-cropping of other crops like papaya, chilly and other vegetables for that time being. Because of this reason, many households at first decided not to engage in cultivation of Pipali. After three year, in every year 1200 kg of Pipali will be produced per acre of land until the crop last. It is usually, the crop lasts for 40 years.

The price of the root of Pipali used to be around Rs. 300 per kg in 2011-12. With around 100-150 households in the whole Lamtaput block involved in the cultivation of Pipali, the products were sold to *kuchiyas* (local traders) and to traders from nearby markets of Margul and Vizianagaram, Andhra Pradesh. As the climate was suitable for this species, the farmers made significant amount of profit of around Rs. 25000 annually. After seeing this margin of profit, almost all the households of Chiliba gave up paddy cultivation and started to plant Pipali. Many households even resorted to shifting cultivation in the nearby hills by clearing the forests and planting Pipali. By 2014, 70 households of Chiliba were ready to harvest Pipali from their respective fields. After 3 years of financial and physical hardship they were dreaming of a fruitful harvest and an income of around Rs. 30,000 per 10 cents of land.

This scenario of people shifting from paddy to Pipali cultivation wasn't only restricted to Chiliba. There was a steep rise of Pipali farming throughout the Lamtaput area. So, during the harvesting period of the year 2014, there was an enormous increase in the production of Pipali. But with very limited excess to national markets, the farmers were bound to bring their produces to their nearby markets in Andhra Pradesh border. This resulted in massive fall in the prices of Pipali with the traders citing a price of Rs. 80-100/kg. The farmers had to face huge losses as the final rate was even less than one/third of what they had expected. At an average, one farmer made only Rs. 6000 per 10 cents of land over investment of three years. Because of the collapse of the local Pipali market, many farmers had to resort to take loans from moneylenders and in turn fall into a vicious debt cycle.

OBJECTIVES

The study was conducted with the aim to accomplish the following objectives:

- To identify the major challenges faced by the local communities involved in Pipali cultivation.
- To comprehend how the gaps can be tackled by integrating the communities into the NRLM structure through Mahila Kisan Sashaktikaran Pariyojana (MKSP).

METHODOLOGY

This was a focused study carried out in the village of Chiliba in Lamtaput block of Koraput district. The total geographical area of village is 276 hectares and inhabited by a total population of 271 who are from the Gadaba tribal community. The primary source of occupation for the villagers is rain-fed agriculture with few of them migrating to nearby cities to work as daily wage labourers. There are a total of 71 households in Chiliba. Baseline survey and focused group discussions were conducted to extract data about Pipali cultivators. In order to understand the market, Rapid Market Assessment and Value Chain Analysis were done through combined efforts of Odisha Livelihoods Mission (OLM) and Asha Kiran Society.

RESULTS AND DISCUSSIONS

Challenges:

- **Lack of infrastructure for storage and value addition**

Due to lack of proper physical infrastructure, the farmers are unable to store the products for long. After harvesting, most of the farmers have to store the produce in cattle sheds or outside their houses in gunny bags. Also, while drying the Pipali roots are scattered directly on the ground. These unsuitable practices significantly bring down the quality of the produce. Unseasonal rains also add to their problems as most of the farmers don't have the space inside their houses to store the product which leads to loss in its quality.

- **Limited access to larger markets and market information**

The only markets available to the farmers are the ones in the towns of Margul and Vizianagram. As they don't have access to larger markets and traders from outside, the farmers become bound to sell their produce in the nearby markets only, at the prices quoted by the traders. As all the farmers from Lamtaput area are dependent on these two markets, all the bargaining power remains at the hands of the traders who can buy the product at prices which suits them. Another outlet source is the local traders who mostly target the vulnerable section of the community and exploit them by buying the produces at very low rates. As the farmers lack proper market information, they don't have much idea on the price of Pipali in outside markets.

- **Individual producer model gives all the bargaining power to the traders**

Due to lack of cohesiveness between the farmers, they mostly follow an individual producer model in which a single farmer takes the produce to the market on his/her own. The nearby markets are situated around 80 km away from Chiliba. As the farmers have to arrange for the logistics on their own, they are not left with much bargaining power in front of the traders. They then have to agree to whatever prices the traders quote as they can't afford to bring back their produce by incurring double the transportation costs.

- **Farmers lack scientific knowledge on cultivation techniques**

As the farmers don't have much knowledge on scientific cultivation techniques. They fail to perform GAP (Good Agricultural Practices) like using of FYM, inter-culture, mulching and proper irrigation measures. Also, the farmers of Chiliba don't practice intercropping with Pipali.

This would not only provide some necessary variations in nutrient use from the soil but also provide the farmers with some financial support during the off season of Pipali.

- **Poor harvesting and post-harvesting practices are prevalent**

Poor harvesting and post-harvesting practices result in significant deterioration in the quality of the produce. Due to this inefficiency, different materials infiltrate the product reducing its prices drastically. The drying methods used by the farmers lead to adulteration of the product as they don't use any protection measures and directly scatter the product over ground.

- **Influence of small scale traders on the farmers**

The small traders who are called *Kuchiyaas* locally take advantage of the problems faced by the villagers and buy their produces at very low rates. As many small farmers face difficulties in arranging logistics, storage and they also lack market information, it becomes quite easy for the local traders to exploit these farmers.

Opportunities:

- **Integrating the communities of Lamtaput into DAY - NRLM structure**

Lamtaput block is planned to be integrated into the structure of Deendayal Atyodaya Yojana – NRLM by making it an intensive block by OLM (Odisha Livelihoods Mission). This would provide an opportunity to create a firm social infrastructure to mobilize the communities and bring them into the fold of Govt. schemes. This would enable the communities to access credit from the GPLF (Gram Panchayat Level Federation) through the SHG and Producers' Group structure.

- **Promoting community owned institutions**

Lamtaput has been selected as one of the blocks to be covered under MKSP project 'Value Chain Intervention and Market Linkage of medicinal plants species of Odisha'. Under this project, Pipali has been identified as one of the seven products to be intervened. It has been proposed that the farmers cultivating Pipali would be mobilized into producer groups of 100 members each and they would be provided thematic training on cultivation practices. The PGs shall be linked with different markets to ensure genuine prices for the farmer community.

- **Involving tribal youth as Community Resource Persons (CRPs)**

Under MKSP Medicinal Plants project, a provision has been kept to create community cadres who will be trained on agricultural, marketing and value addition techniques. A progressive

minded farmer would be selected on the basis of their traditional knowledge and education to become Udyog Mitras under the project. Each Udyog Mitra will provide handholding support to one PG comprising of 100 members. After going through different thematic trainings, the Udyog Mitras shall be given the task of empowering the farmers by providing them on-field trainings and handholding support. The Udyog Mitras shall be remunerated on the basis of their performance by OLM.

- **Capacity building of farmers on cultivation, harvesting and post-harvesting techniques**

In order to enhance the capacity of the farmers, they will be trained on different thematic areas like plantation techniques, sustainable harvesting and post- harvesting, primary processing and value addition practices. This would help them in increasing the quantity of their produce and maintain good quality produces which will in turn help in penetrating to larger markets of medicinal plants.

- **Value addition to the products through primary processing**

The producer groups will act the value-addition canters in the supply chain. The PG will buy the produces from the farmers at genuine market price through the Community Investment Fund provided by OLM under the MKSP project. The PG members will then perform different primary processing like cleaning, segregating, sorting, grading and drying for value addition of the products. The value addition processes will be closely monitored and supported by the Udyog Mitras.

- **Creating linkage with larger markets for their products**

At present, the biggest problem faced by the Pipali farmers of Lamtaput is that they have no access to larger markets. Limited access to market along with many farmers taking up Pipali cultivation has led to massive over-production. This resulted in fall in the prices of Pipali from Rs. 300/ kg to Rs. 80-100/kg in 2016. Under MKSP medicinal plants, through market analysis, various institutional buyers and large traders have been identified. The traders and farmers were brought to the same platform by organizing Buyer-Seller Meet at the state level and workshops at district and block level. Market linkages were created between the PGs and the traders for the upcoming year. This will now help the traders get genuine prices for their produces and efforts as they will have an open market for their produces.

Figure 1: Existing value chain of Pipali

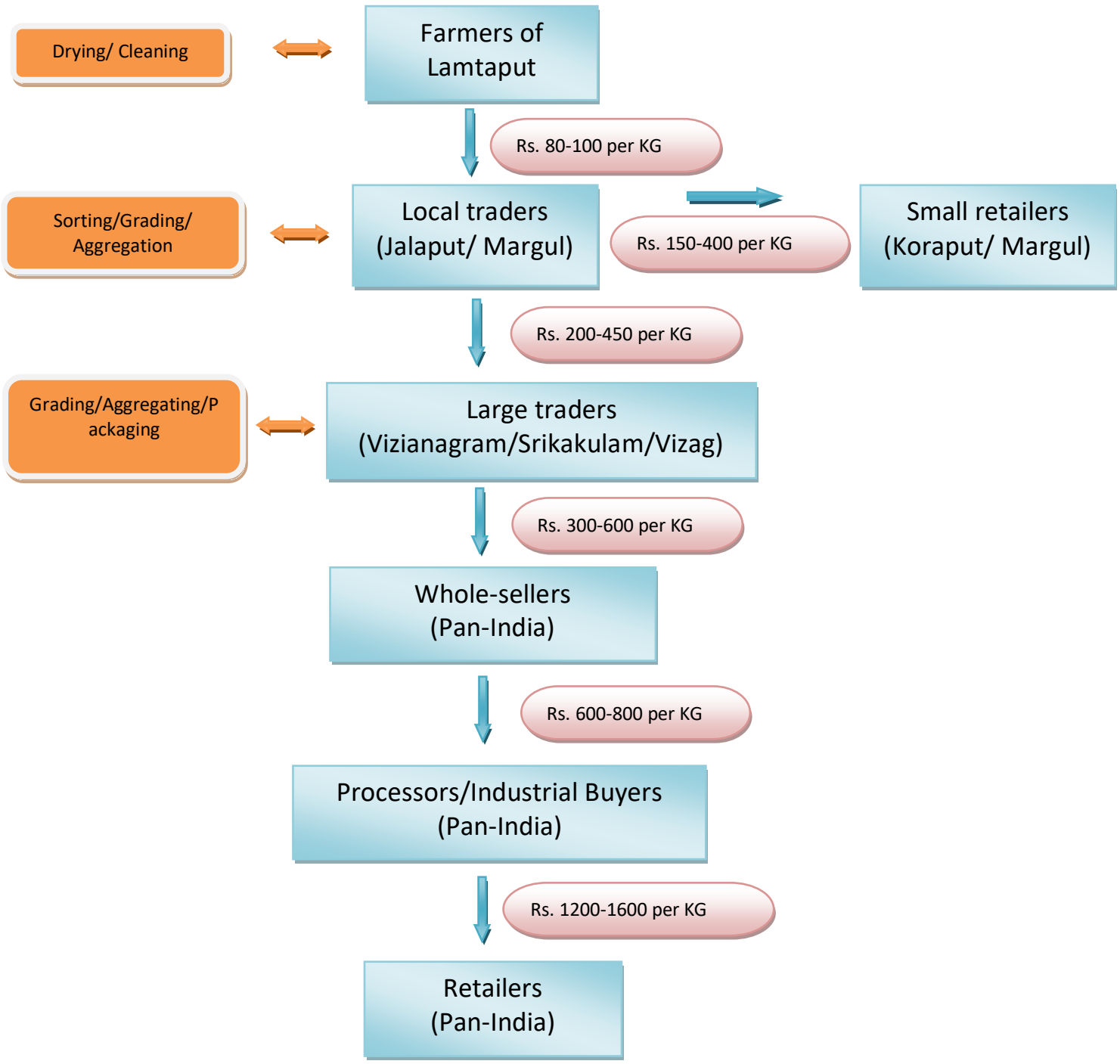
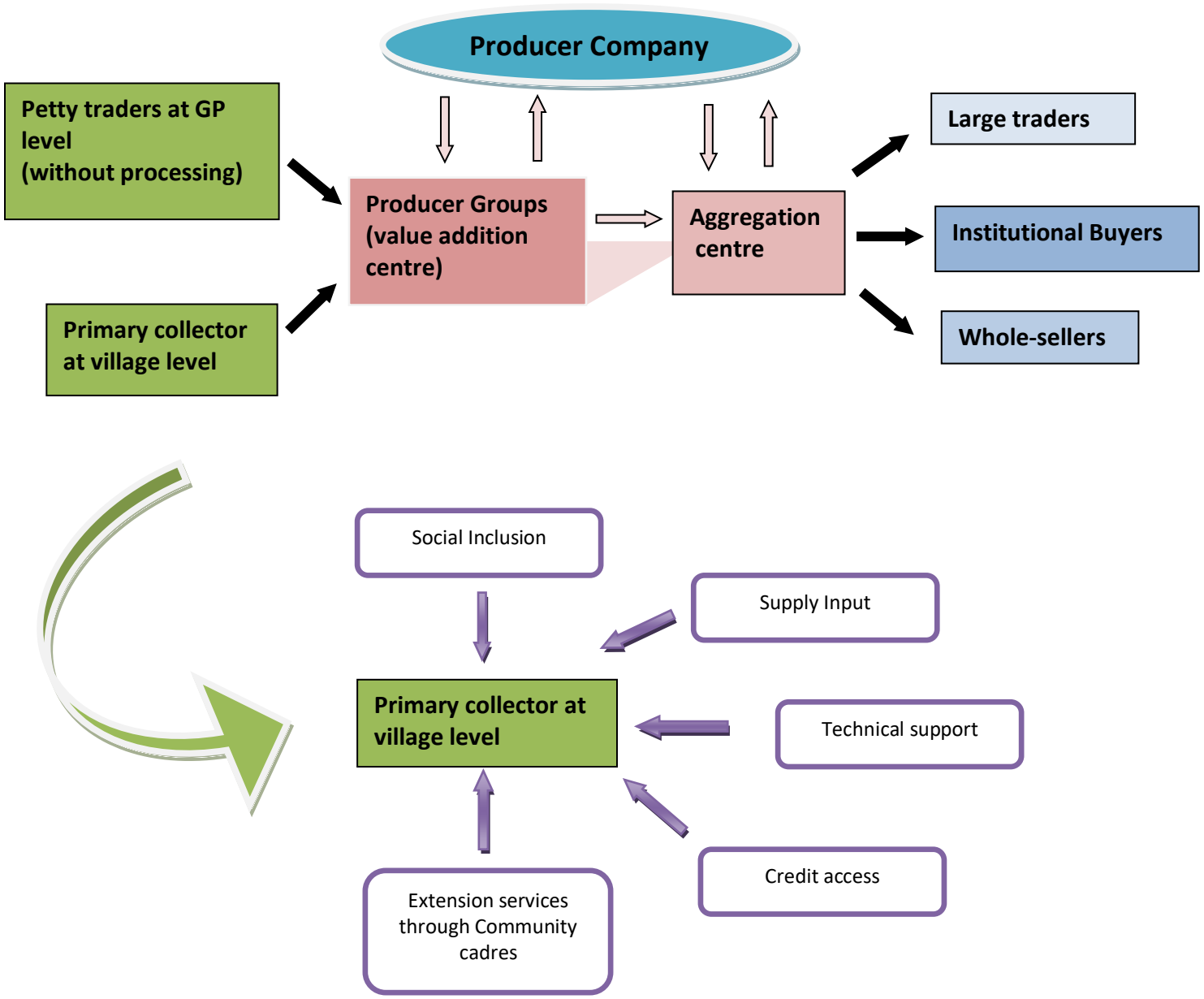


Figure 2: Proposed value chain



CONCLUSION

When the Pipali farmers of Meghalaya, MP and Assam were selling their produce at the rate of Rs. 300 per kg, the farmers from Koraput were being exploited by the local traders by buying their produce at Rs. 80-100 per kg. With an established value chain that is largely dependent on the farmer producer organisations, the business for Pipali can again flourish in the Lamtaput region. The MKSP Medicinal Plants project would bring cohesiveness among the farmers by

bringing them together into an aggregation model. They will then have access to credit in the form of community investment fund from DAY- NRLM. With trainings on different thematic areas, farmers will be empowered on scientific cultivation techniques and primary processing activities. This would enable them to produce good quality products which can be traded to institutional buyers. This will create an environment where more farmers can take up Pipali cultivation in the hope of increasing their income without the persisting fear of over-production and fall in prices. Elimination of middlemen will allow the farmers to tap the final market directly which would fetch them much higher prices for their produce.

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