

November 2012

‘How To’

How to do Sub sector Analysis

A sub sector analysis is a detailed study of a particular product and all the players involved in the process. A sub sector could be done either for a final product (paper, candles, etc.), raw material (jute, cotton, etc.) or even a service (couriers, etc.)

The sub sector is an effective tool to understand the overall picture of the production and value addition processes involved in making a product. It has been used by development agencies attempting meaningful livelihoods interventions for the poor. Usually, small and medium enterprises, not only lack resources to enhance their functioning but also the vantage point of the market they function in.

A sub sector is more than a value chain analysis. A sub sector studies the context and environment in which the production and distribution occurs. Therefore, a sub sector points to the interaction between the external and internal elements that help the production and distribution processes. The analysis cuts across various sectors that are relevant to the product.

The major steps for doing a sub-sector study are:

1. Preliminary sub sector map
2. Refining the sub sector map
3. Surveying the external environment— institutional support, policy framework review
4. Choosing an intervention point

Methodology of a Ragi sub sector study in Andhra Pradesh

The focus of Ragi value chain and sub-sector study was to analyze production processes, market (from local to international) for commodity and its products, and policy framework for Ragi. To understand the entire Ragi value chain in integration, a framework was developed in the beginning. Based on this and secondary data, the whole gambit of sub-sector is critically analyzed. During the study, it was released that production practices, market and uses for Ragi and other millets are same. In addition to this, at international level, figure for Ragi was difficult to find as data for all the millets are clubbed. Therefore entire millet sub-sector is studied.

To begin with the study, secondary data from government departments, Agriculture University and ICRISAT was collected. During this, visit to technical institutes like ICRISAT, CRIDA and universities were also made.

Having done this, to understand the production process, marketing by Ragi farmers and local markets, 9 villages in five districts – Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and Chittoor were visited. Although the study entails finding out interventions in Ragi for Coastal Andhra, Koraput district in Orissa, adjoining to tribal area of Coastal Andhra Pradesh, was also covered, This is done to capture all the elements in Ragi production and marketing, which can influence the tribal meso economy in extended coastal tribal area. While conducting the study, one village from Karnataka, highest Ragi producing state, is also covered. All put together, 13 villages were covered during the study. Selection of villages based on secondary data (Mandals, where production of Ragi is high) and expert opinion by local NGOs.

All the main local markets around the villages studied were covered. State level markets in Srikakulam, Vizianagaram, Visakhapatnam, Vijayawada and Chittoor were covered. In addition to this, national market at Bangalore was also studied.

For comprehending the dynamic influence of various policies on the Ragi production, marketing and consumption, real life policy related experiences of villagers were gathered. Subsequently, the related information from concerned department was collected and discussed with several opinion leaders.

For all the above, different methodologies were used to collect the data and analyze the information. Following table presents the methodologies used for various components.

Sub sector analysis is done through secondary research and interacting with key players in the sector. The study starts with familiarizing with the sector through a secondary research. During this process, one should familiarize themselves with all the key outputs of the sub sector. These could be products in various forms. Make an outline of the macro picture of the sub sector—where the product is produced, and in what quantities, local, national and international markets, the policy framework of the sub sector.

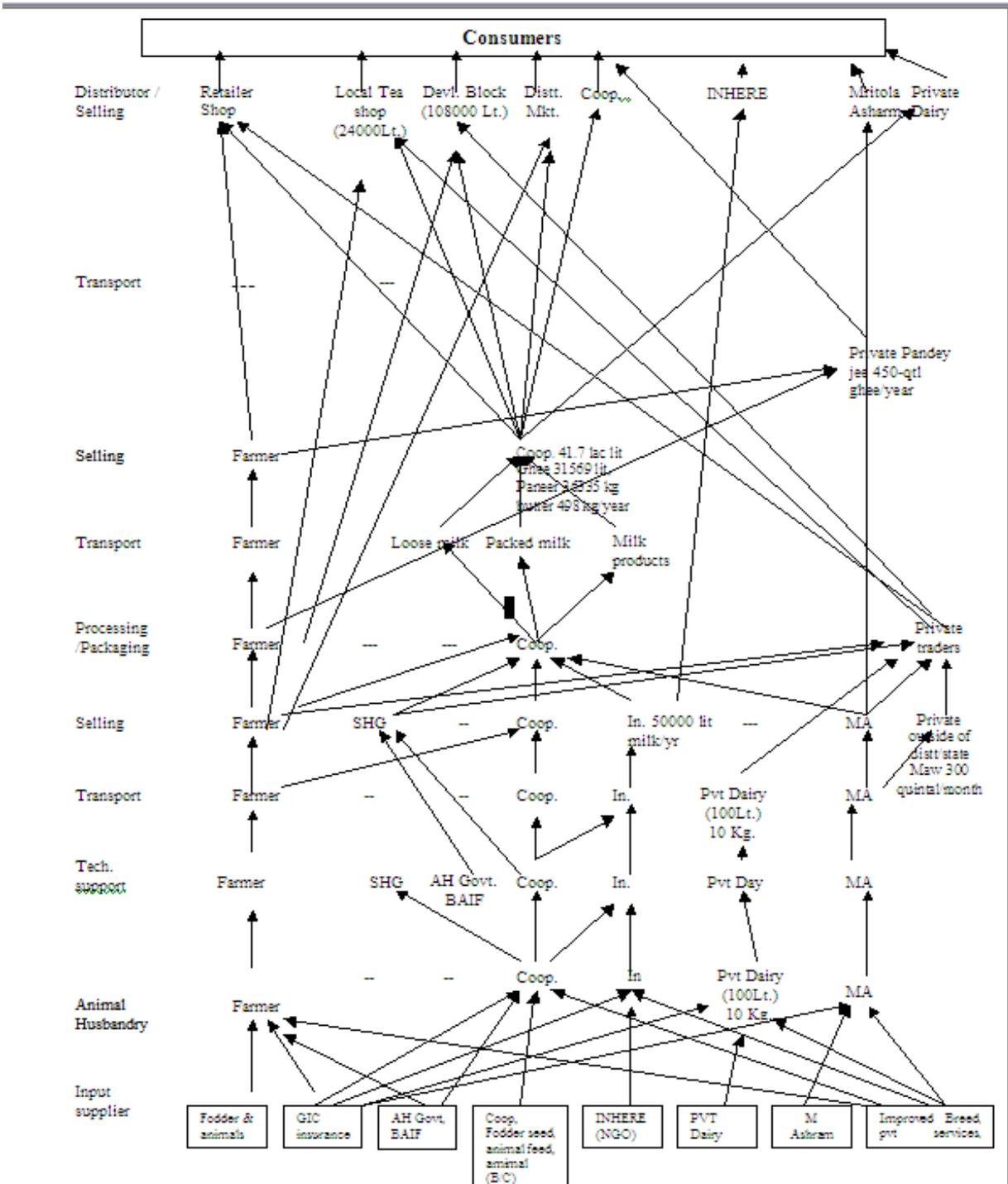
In the process, identify the major players (local and national) in the production and distribution of the product. Prepare a questionnaire or checklist to interview the key players.

The preliminary map of the sub sector is a snapshot of the production and distribution of

the product. With this in hand, one should proceed to develop a deeper and clearer understanding of the sub sector.

Preliminary sub sector Map

With the information available from the preliminary research, prepare an initial sub-sector map. The map should plot the various processes the product undergoes till it reaches the hands of the consumer. The map should include a list of all the functions, participants,



(source: UPASaC)

markets, product forms, etc.

Interview 2-3 key players in each stage to get a picture of the activities at each stage.

Information such as amount of production in the area and where it is sold (intermediate and final markets) is vital. Also find out where they procure the raw material from and the different forms of the product. Further, record the use of technology and the source of funds and other support in production. List all the facilitating or support organizations that help in the sub sector.

2. Refining the Sub Sector Map

A value chain analysis of the product would be useful to cover its production and distribution products. Conduct a detailed value chain of the product. Note that, for the sub sector study, the value chain will go beyond the local market. Track the variety of forms in which the product reaches the end consumer.

Stages in the Value Chain of Dairy				
Inputs	Pre-production	Production	Local value addition	Marketing
<ul style="list-style-type: none"> • Green fodder • Hay • Feed concentrate • Feed • De-oiled cake • Veterinary services • Water • Shed or shelter for animals • Milk routes 	<ul style="list-style-type: none"> • Feeding the animal with green fodder and other feeds • Accessing veterinary services • Cleaning the animal with water 	<ul style="list-style-type: none"> • Milk routes • Access to veterinary services • Water • Clean and hygienic environment for animals • Collective milk procurement • Care of calves 	<ul style="list-style-type: none"> • Cooling the milk before pouring it in cooperative • Milk testing • Chilling the milk 	<ul style="list-style-type: none"> • Identifying marketing channel • Making dairy products like curd, ghee, etc.

Review the context in which the sub sector exists. Study the policies, laws, and rules and regulations that affect the sub sector. Consider the institutions that support the sub sector, such as credit institutions, raw material suppliers, etc. and the services they offer to the producers. Explore the market regulations that function in the sub sector and how they affect the production and distribution process.

Important questions to be asked include the size of the market, where the raw materials are procured from, the number of players in the activity, the number of people employed to do the activity, where the product is sold, etc

Quantify the number of enterprises involved in each stage of the value addition, the number of people employed, gender division of labour, wages, returns to the producer, the environmental impact of the sub sector, etc.

Also capture the consumption patterns of the product. This would be done mostly through secondary research. Study the changes in consumption— in what forms the product is being consumed, at what time of the year the demand is higher, substitute goods, etc.

Surveying the External Environment

Study the environment in which the sub sector operates. This could be done through secondary research and interacting with important individuals and institutions that support the sub sector.

Institutional Support

Look at the all the institutions and organizations providing services to the sub sector. These could be at the local level, district level, state or even national level.

Institutional Support for Soy in Adilabad district, Andhra Pradesh

Infrastructure is a major gap in the Soy sector in Adilabad. Tools for improving production, storage facilities, roads, and transport are major issues that are reducing efficiency in the sector. While this is true of the entire agriculture sector in the district, the requirement for tools such as low speed harvesters, storage facility, drying platforms, computerized weighing equipment is specific to the Soy sector.

The poor road connectivity has restricted farmers from reaching profitable markets time and again. Only a few villages are well connected by roads. The hilly and forest terrain of the district is cited as a reason for the lack of roads. Added to this is the abysmal state of storage facilities such as weather-proof godowns at the mandals. This prevents the farmers from storing their produce and selling it at when the market prices are high. There are 84 Government owned and private godowns in the district with a total installed capacity of 259530 MTs.

The local Agriculture Department is playing a significant role in providing inputs to the farmers. It provides seeds at subsidized rates, although it gets delayed sometimes. The Department also provides pesticide and a pesticide sprayer at affordable rates to the farmers. The Electricity Department provides free power for a few hours in a day to farmers with bore connections.

The study shows that there is a need to upgrade the skills and technology used by Soy farmers in the district. The Agriculture Department along with a few private organizations are providing training to some farmers in the district. But this effort is not sufficient to increase the overall production. Research is being done by institutions such as KVKs, the Agriculture University and others about new practices to improve productivity. Service providers who could provide information, skills and market linkages are also lacking in the district.

The Soy cultivators access credit from both formal and informal sources. It is estimated that about 50% farmers still depend on informal sources as they are not aware or have access to formal finance institutions. Banks, microfinance institutions, SHGs, cooperatives are the prevailing credit providers in the district.

- Credit institutions— local moneylenders, banks, microfinance companies, CBOs, cooperatives, etc.
- Input suppliers— companies, natural capital, local producers
- Value addition—Packing industries, technology
- Marketing support institutions—government owned companies
- Infrastructure available to the producers in the sub sector
- Technology used in production

The next step would be to look at the trends in the sub sector. Examine the market demand over years and notice whether it is volatile or steady. Research on some of the alternate methods in production—this could be the different methods used in other areas or new technologies. Analyse the risks and constraints in the sub sector. These could be related to the storage of the products, policy constraints, market constraints, etc.

Reviewing the Policy Framework

It is important to look at the policies and laws that regulate or support the sub sector. This will be done mainly through secondary research. Getting views of experts on the implications of these policies would also be useful.

Choosing the intervention point

Government Policies—Minimum support prices

The Food, Civil Supplies & Consumer Affairs Department is engaged in the activities of procurement, distribution, market intervention and price and quality control of essential commodities.

Objectives of the departments are

- To ensure the availability of essential commodities, including petroleum products, in the market, at affordable prices.
- To ensure Minimum Support Price (MSP) for paddy/maize produced by farmers.
- To procure paddy under MSP operations.
- To procure rice for running the state programmes and for the central pool.
- To lift and distribute essential commodities like rice, sugar, wheat and kerosene, in a timely manner, under Public Distribution System (PDS) and other schemes like Annapurna, Anthyodaya, Annayojana and NPNSPE.
- To provide gas connections under the Deepam scheme to women below the poverty line.

The department focuses on procurement of Paddy under MSP operations. The main objective is to ensure remunerative price for the paddy produced by the farmers of Andhra Pradesh through the instrumentality of MSP. There are number of Paddy purchase centers, which are supervised by special teams in each district. They also have operational guidelines for procurement of paddy at MSP. Although minimum support prices for other crops and Ragi are also announced, the entire scheme for minimum support price focuses only on procurement and controlling the prices of Paddy. The lack of access and inability of poor Ragi growing farmers reach to agriculture market yards, coupled with marginalizing other commodities from MSP by government of Andhra Pradesh, have reduced the bargaining power of poor Ragi farmers in Ragi trade.

Public Distribution System

The Food, Civil Supplies & Consumer Affairs Department is engaged in the activities of distribution of essential commodities. As per this, Public Distribution Systems (PDS) provides essential commodities - Rice, Wheat, Sugar and Kerosene to around 1.59 crore households through white, pink, A.A.Y. and Annapurana cards. *PDS, which is reaching to 98.83 lakh households, also theoretically covers the poor Ragi consumer's families, whose basic staple food Ragi is much cheaper than the Rice provided by PDS. The price difference is around Rs 2 per Kg and it becomes significant, if the quantity consumed for Ragi and Rice and their daily wages are compared. The calculation is for 4 members family for one day. This becomes for significant, when their daily wages are Rs. 10-15 per day within the village and Rs 20-50 per day outside the village. In case of Rs. 50 per day rate of wages, the differential expenditure on Rice is 9% of total wages.*

Promotion of cash crop in ITDA areas

In the pursuit to improve the livelihoods of tribal in ITDA areas, department of tribal development and welfare has started several schemes. One of those schemes is – cashew plantation in Vizianagaram and Srikakulam and coffee plantation in Visakhapatnam. ITDA provides financial assistance, technical and resource assistance to these farmers to grow cashew and coffee on their land. In Vizianagaram and Srikakulam, farmers have 1-2 acres of cashew land, which provides them with cash income of 5000 to 10,000 in a year, without any financial and physical investment. Similarly, farmers are earning from coffee as well or getting wage labour of Rs. 60 per day in coffee plantation. As compare to Ragi, where perceived returns are lower, these crops – cashew and coffee provide better option. As a result, farmers are, slowly, focusing on these crop and Paddy and forgoing the production of Ragi. In other places also, when asked, farmers would like to take up cash crops like cotton or paddy, if they have access to water and finances required for the crops. Only, in Visakhapatnam, farmers were assertive in their preference for Ragi and its importance in their household economy.

Rice at Residential schools

ITDA schools and hostels provide Rice in the meals to tribal children and, eventually, they have become Rice eaters. While going back to their homes in summer holidays, these children ask for rice at their homes. When offered Ragi in food, they dislike the taste and do not accept it as their major food item. Thus, ITDA schools and hostels are inculcating a new food habit among the new generation of tribal. This is also important as most of the children, even girls, are coming to these schools for higher education on account of growing awareness among tribal for importance of education.

GCC

The Girijan Cooperative Corporation Ltd. (GCC) was established during 1956 with headquarters at Visakhapatnam. It has monopoly right over procurement of Minor Forest Produce (MFP) in tribal areas. The major activities of GCC include.

- Procurement of Minor Forest Produce and other agricultural produce like cotton, red gram, Niger, turmeric, ginger, soybeans, chillies, cashew and piper langum from tribal.
- Supply of domestic requirements at reasonable prices through Daily Requirement Depots (DR) in tribal areas, and
- Provision of agricultural and consumption loans to the tribal.

Like PDS, Girijan Cooperative Corporation Ltd provides items of household consumptions through its Daily Requirement Depots (DR). It started the function as government runs PDS did not have adequate network in tribal area. The fair price depots of GCC provide Rice and other essential commodities to tribal. This has also encouraged and contributed in the habit of eating rice among tribal. **Two rupee rice scheme**

The populist schemes of politicians like two rupee rice by N.T.R., Ex-CM of Andhra Pradesh, have also facilitated the consumption of Rice. This made the rice cheaper, whereby Ragi consumer shifted to Rice. Eventual, the prices went back to pre scheme level. But these Ragi consumers got used to of rice.

Once the sub sector has been thoroughly understood, identify the gaps and opportunities for further intervention. Analyze the value chain of the product for gaps and opportunities in the production

Gaps and Opportunities Analysis of Poultry (Kurolier) [source: (UPASaC)

Bottlenecks in poultry

After studying and analysing the Poultry Subsector map following bottlenecks (weak points) were came in this Subsector.

- DOCs (chicks) distribution: There was a clear evidence of the absence of efficient supply chain, which links from hatching unit and reaches up to poultry rearers' household at remote places.
- Poultry rearing: There is lack of collaboration with line department with the poultry rearers causing serious technical gaps in poultry husbandry.
- Difficulties in transportation of birds from mother units due to geographical conditions.
- Lack of specialized poultry promotion agency: Seeing the vast and difficult terrain present agencies are inadequate.
- Transportation: Less numbers of specialised transporters were available for timely supply of birds and eggs.
- Scientific infrastructure and training: Absence of technically sound poultry sheds and skills of brooding practices at hills.
- Linkages with service providers: Less interaction with the support service provider, like-medicines, feed, equipments etc. are one of important ruling constraint in this Subsector. Though such infrastructure is available, but reach is poor.

Opportunities

In spite of many weaknesses, there were tremendous opportunities present for growth in this Subsector as given under.

1. Huge gap exist in local demand and local supplies of poultry produce, both in meat and in eggs.
2. The climatic conditions of the area are contusive for poultry, production as well as consumption.
3. Kuroiller, a breed specifically developed for hilly area is well accepted amongst the poultry farmers in the region.
4. Institutionalization support available.

Poultry rearing provides employment to women.

Leverage points

Based on the above discussion on bottlenecks and opportunities, following ideas came for possible intervention area in this Poultry Subsector for Livelihood promotion.

1. Establishing more mother units for easy supply of DOC and redistribution at remote place. It will also minimize the risk of DOC rearing at extreme remote places.
2. Training some local person & giving them loan for small vehicle for specialised poultry transportations.
3. Training and service package to local youth on different aspects of poultry, like production, veterinary care, transporting and marketing & trading. These youths will work as service providers on profit basis.
4. A package of regular technical trainings and veterinary assistance to rearers.
5. Low cost shed construction support for poultry farming.
6. Establishing the supply chain of the poultry products including support services.

Support in working capital & revolving fund

and market of the product.

The intervention may be required at any stage in the value chain of the product or also in the environment in which the sub sector operates. List all the possible interventions and put them through a feasibility test (sustainability, viability, cost-effectiveness,...). ❖