



An Assessment of Market Oriented Production and Agri-business by the Smallholders: Some Approaches and Evidences from Rural Hills of Nepal

The project aims to boost up the capacity of smallholder farmers to increase growth and productivity in agriculture and agri-business in a sustainable way.



Promoting off-season tomato farming in Sankhuwasabha district

The Context

Smallholder agriculture dominates the majority of landscapes in Nepal with the average holding size of 0.8 ha. The number of nearly half of all the farmers holding less than 0.5 ha of land and land fragmentation into small farms appears to be rising rather than falling. Over the years, the average size of holding has declined by 28% and many factors have contributed to this trend. This includes population growth, inheritance practices, rural poverty and unfriendly land leasing systems. Most importantly, majority of the poor falls under this phenomenon. There is a lack of both, on and off-farm employment opportunities for smallholders on one hand and the other, they are typically deprived of access and control over agricultural inputs along with education and capacity building in agriculture entrepreneurships. However, it is evident that small farmers will continue to be the custodian of vast areas of agricultural land in Nepal for at least some decades to come.

Realizing the fact, RRN has implemented the "**Enhancing Food Security and Agricultural Production Capacities Program**" which has brought remarkable changes among the rural poor households in Sankhuwasava, Bhojpur, and Khotang Districts. **Basically, the project aims to boost up the capacity of smallholder farmers to increase growth and productivity in agriculture and agri-business in a sustainable way.** Thus, the briefing paper intends to highlight on some approaches that the project took and the evidences of remarkable achievements visualized so far. Field observation, focused group discussions, case studies, interviews, progress reports and other publications have been the sources of information to produce this paper.

Interventions

Since majority of the farmers in Nepal are holding less than 0.5 ha. of land. Smallholders in the project area have been provided with support mainly in three areas; *improving the basic*

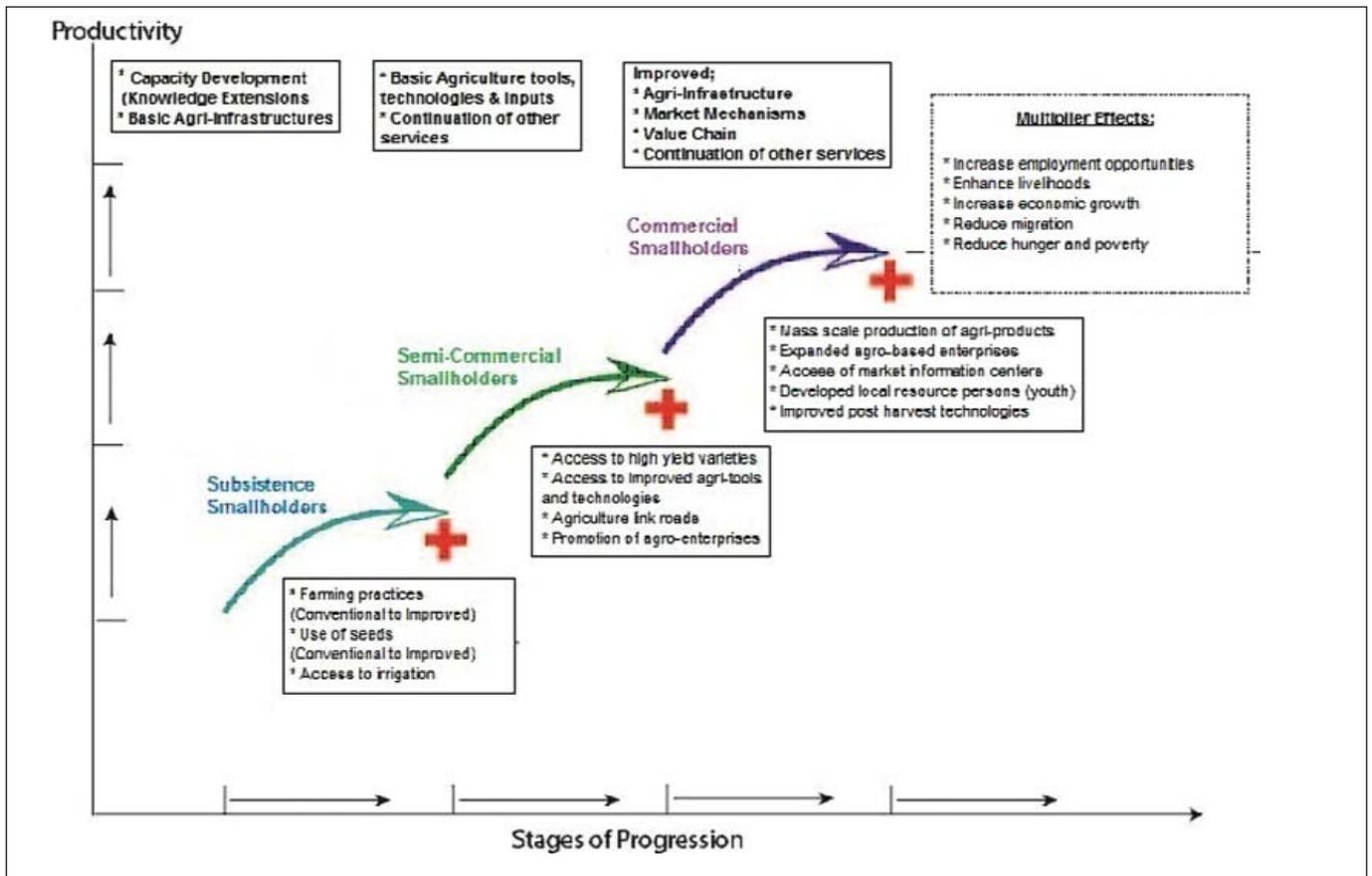


Figure 1: Intervention approach applied for market oriented production by smallholders

As per the approach is highly applied in the intervention, farming by smallholders progress in their capability to undertake semi-commercial, commercial farming and so on.

agriculture infrastructures (irrigation and agriculture link roads), capacity building of smallholders (trainings, marketing, introduction of appropriate technologies), and input supports (mainly improved seeds, seedlings, tools, etc). The intervention approaches has become very effective since the project areas was largely dominated by smallholder, resource poor and marginalized farmers who were suffering from less production and low income from their farming practice, were lacking in irrigation, transportation, market information, mechanisms, basic inputs and improved technology as well. The project has contributed in filling the gap of all the things that were lacking and has shown tremendous potential in agriculture production, development of agribusiness, increased employment especially among youths and ultimately better livelihoods of the smallholders.

As per the approach is highly applied in the intervention, farming by smallholders progress in their capability to undertake semi-commercial, commercial farming and so on. Enhanced skills, access to appropriate inputs, technologies are the key factors contributing to the progression. Fig. 1 visualizes the progressive improvements in farming systems and livelihood mechanism through improvement in agriculture infrastructure, enhancing skills/technologies (improved seeds, farming tools, developing marketing mechanism, promoting high value

cash crops, etc.) at the subsistence level to successively improve on the profession of smallholders and agribusiness sector as a whole.

At the low end of the spectrum (**first stage**), the project has provided various trainings, exposures to the subsistence smallholders on improved farming practices with the provision of seeds and seedlings of high value crops such as chillies, ginger, garlic, onion, turmeric, mushroom, some vegetables and other seasonal crops. Those farmers were also supported with irrigation facilities and agricultural link roads. Their participation in exposure visits was found to be very fruitful since the initiatives of innovative farming practices and agro-enterprises operated by smallholders in different parts of the countries were very real. At this level, the farmers basically got awareness on improved farming, prepared and considered that agriculture could also be a better profession and business.

In the **second stage**, the project facilitated smallholders with follow up and other advance trainings, they were encouraged to make progressive shift from cultivation of cereals to cultivation of high value crops expanding the scale of cultivation. They were also provided appropriate technologies of farming and the agriculture inputs such as seeds, seedlings of new and improved varieties mostly the indigenous crops, were introduced with some horticultural

crops such as papaya, banana, citrus fruits, etc. Similarly, farmers were trained to use and get exposed with the improved tools and inputs such as sprinklers, poly pipes, plastic houses, etc. In this stage, smallholders were made familiar with the importance of improved farming, agriculture inputs, and technologies and started to gain considerable economic returns with increased incomes from the improved farming. Further, smallholders of the project area participated extensively for the improved farming practices. At the same stage, construction of agriculture roads connected smallholders to the market that has created open-spaces for promotion of agro-enterprises at the community level.

Most of the activities have been carried out through the smallholder's self help groups (SHGs). Organizing them in SHGs and the trainings on improved farming helped them a lot for the cohesiveness of the communities and common involvement in market led production of the feasible crops. Their joint efforts encouraged them to go for mass production of certain crops which ultimately helped them to increase agro-based enterprises. So, especially on the **third stage**, the smallholders facilitated and got involved to develop community agriculture infrastructures, resources centers, etc. In this case, they developed community irrigation schemes by constructing community ponds, extended agriculture link roads, established market information centers, market collection centers and developed local resource persons (**trained youths on small scale agro-processing such as packaging and branding of local agriculture products, curd and ghee making, food preservation, juice and jam, dried vegetable balls with the provision of equipments support to establish and promote agro-based enterprises**).

Increments of the yield can be achieved across the stages as well as within each stage; however, evidence has shown that continuous involvement of smallholders on commercial farming (especially on high value crops) ensures the production of agriculture goods in mass scale, increased varieties of agro-enterprises and ultimately helps for better incomes and livelihoods. Further, the project has laid focus on market led production, participation of youths in agriculture sector and this approach has been very effective to produce higher multiplier effects. This result in shifting from subsistence to market oriented farming by the smallholders including youths ensures the promotion of agro-enterprises unleashes the employment opportunities, reduced migration especially youths, increased economic growth, enhances livelihoods and ultimately contributes to overcome hunger and poverty among the smallholders and the nation as well.



Seeds and seedlings support to local women peasants in Sankhuwasabha district

Evidences

i) Increasing crop production and productivity

In the past years, Sankhuwasava district has faced a huge loss of crop production due to the nature induced disasters, such as erratic rainfall, hailstorm, landslides, floods and disease infestation which has severely affected life and livelihoods of the vulnerable communities. Moreover, the situation of food insecurity transpired in several parts of the district. In some parts of the district, the severities are lessened. Constructing irrigation canals converted most of the barren and uncultivated agriculture lands into productive and fertile lands. More than 350 acre of land has been irrigated benefiting at least 500 households. These activities brought a revolution in increasing crop production and economic returns in these areas. Production of major crops such as rice, wheat and maize were recorded to be doubled in the project areas. According to the DADO at Sankhuwasava district, "Malta, Pangtha and Piple started to be accounted as the resource center of rice, wheat and vegetable production which has high market demand and somehow fulfilled the food demand of the whole district". Farmers produce some of these high value crops and vegetable products twice a year that has drastically improved the level of income.

ii) Intensification and diversification of crops from subsistence to economic

Monoculture, especially of cereal crops, constitutes the regular farming practices as traditional and subsistence farming is witnessed in the vast majority of the smallholder living in the Sankhuwasava district. In some parts of the district, farmers grow rice followed by wheat and in other parts maize followed by millet. Mostly, they grow crops in a year which is scientifically and economically not viable. With that reason,

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the project has introduced and enhanced multi-cropping, improved market oriented farming of high value cash crops such as chillies, ginger, tomato and other vegetable products in their existing farm lands.

Similarly, conduction of trainings on cultivation and promotion of high value cash crops transferred technical know-how and do-how to the resource poor communities. Gradually, diversification and production in mass scale started and farmers are able to make judgement about the comparative benefits from subsistence and improved farming. Farmers from the project areas have changed their cropping system from subsistence to commercial. Most of the maize and millet fields converted into vegetable fields for tomato, chillies and ginger production. Consequently, it has brought about tremendous social and economic changes in the small scale producers. At present, the average smallholder farmers are earning NRs. 10,000.00-300,000.00 annually from vegetable farming. Likewise, small scale producers observed that the cost benefit ratio per unit land area stands at 10 times more than that of maize and millet-based farming practices. This maintains and enhances the economic viability of farmers to help improve their livelihoods. Hence, such efforts have met the increased demand for food and other livelihood needs which must come through diversification of agriculture practices. Moreover, the activity has also generated employment opportunities to the village youths, reduced migration of male household members for work because of non-farm income earning opportunities, and engaged women farmers in income generation activities.

iii) Promoting agro-enterprises and market information centers

Farming profession in rural areas is not considered as a respected job and business since people in rural areas are mostly following conventional agricultural practices and are lacking of improved technologies, qualified technicians and marketing opportunities. By

realizing the fact, the project therefore developed entrepreneurs locally by providing vocational, agro-business, entrepreneurship training to unemployed village youth in agro-processing and post harvest technologies. With the support of basic tools and equipments of agro processing and post harvest technology youths and smallholders have been empowered to promote agro- enterprises and they have become a change agent for improved farming. SHGs initiated community farming practices since they already started dairy processing plant at their locality and also started producing dry food items. The project has established market information centers with joint collaboration of DADO which greatly supported the marketing opportunities for their agricultural products. Similarly, with the close coordination of DADO, the organization has launched the concept of toll free phone to make the market information center more effective and accessible. Now, the farmers can easily obtain necessary information about availability of agriculture products, market prices of different products, availability of inputs, etc. Furthermore, some of the positive implication of this initiative has created an entrepreneurial culture among rural communities, whereby farmers produce what they can market rather than trying to market what they produce.

Lesson Learned and Way Forward

This project has brought spectacular changes among target farmers empowering themselves for transforming from subsistence to business oriented farming. It has been observed that the smallholder producers could contribute significantly to alleviate hunger and rural poverty. Capacity building of farmers, recent increment of agricultural enterprises, market led agriculture production, etc. has been resulting in increased economic benefits, employment opportunities and improved livelihoods in the project area. In fact, smallholders are the key players for the development of entrepreneurs and agro-business and ultimately helping for better economic growth in rural areas.

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Rural Reconstruction Nepal (RRN), established in 1989, is a Nepali non-government, social development organisation involved in rural development, action-oriented research and policy advocacy focusing on peasants, poor women, dalits and indigenous nationalities, and other vulnerable communities through the process of facilitation, social mobilisation, empowerment and self-organisation. RRN's work is based on the four-fold approach to rural reconstruction covering: education to combat illiteracy and empower people to access their rights; sustainable livelihood to fight poverty; health to prevent disease, and self-government to overcome civic inertia.



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