

Opportunities and empowerment among rural youth through Small Scale Soya Processing Unit of paneer (*Tofu*)

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■ **ABSTRACT :** In agriculture food processing contributes its major role in economy of India. According to Birdar and Bhawani 2015, in India it is found that beside largest producer of grain, cereals, pulses of many varieties only 14 per cent of total work force is engaged in agro processing sector directly. The processing of food commodities at village level will not only controls post harvest losses but also provide additional employment to the local people. Kota district is considered as soybean rich area of Rajasthan, comprising 822000 hectare area (GRAM, 2017). Food processing is the major sector for economic upliftment of nation (Tiwari *et al.*, 2016) Hence the main objective of the study was to strengthen the livelihood security of rural youth, providing opportunities in establishing soya processing unit through RKVY project of food processing unit of Agriculture University, Kota. Youth gets opportunities to become and entrepreneur. The research was conducted on 12 groups of food processing training who were introduced soya processing machineries and further giving technical support for establishing soya milk and paneer plants. After establishing and efficiently running this plant the economic and social empowerment was judged by their success stories. It was found that each individual was earning on an average Rs. 20,000-80,000 per month and got social recognition, confidence leadership ability, cooperation, satisfaction through such entrepreneurship.

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In India 60 per cent of population depends on agriculture and agriculture based activities. According to Parwez, 2017. The role of Agro based industries enhance from the point of view of development of rural and backward people. Community based entrepreneurship is considered to be an important instrument for the realization of potential among marginal and deprived communities, empowered employee improve performance largely by finding work process

(Fernandez and Moldogezeiv, 2013). Small scale industries needs less funds and mainly based on labour intensive technology, locally available raw material So, these industries got more success in India (Singh, 2014).

Unemployment has a large negative impact on subjective well-being of individuals (Winkelmann, 2009). Small scale food processing sector has become the second largest employment provider after agriculture. It's a agro based industry, so direct relation with

agriculture and amazing feature of industry, which has better future prospects, consumption, export and growth. In a developing country like India the small scale sector occupies a special place in the industrial structure (Modi, 2014). Small scale food processing unit can be helpful in maintaining high prices of agriculture produce although production in abundance, resulting into increased individual rural income and their standard of living ultimately. Considering these facts food processing unit of Agriculture University, Kota provide skills to farm youth on latest food processing technologies.

So that farm youth can start up the small scale industries of their own crops, Soybean is the major harvesting crop of Hadoti Region. Soybean has high protein content and rich in carbohydrates, fats (omega 3 fatty acids), minerals, vitamins (Chaudhary *et al.*, 2011), phytochemicals, isoflavons and phytic acid (Mridula *et al.*, 2009). It contains 43.2 g. protein, 20.9 g carbohydrates, 19.5 g fat, 240 mg. calcium, 432 calorie, 11.5 iron and reasonable amount of minerals and vitamins. (Singh and Sahay, 2002) The health benefits of soybean includes lower blood cholesterol, check constipation, good for diabetics, prevents cardio-vascular diseases (Omoni and Aluko, 2005). In India Rajasthan, Madhya Pradesh and Maharashtra are the largest producer of soybean. In Rajasthan it produces in abundance at Hadoti region mainly in KOTA (Tiwari and Sanadya, 2017). Processing industries based on soyabean give more benefits to the farmer as raw soyabean can be sold nearly 40-45 rupees/ kg but after processing the products can be sold more than 100/kg like soya paneer, Soya nuts, Nutrinuggets, Nutrimeal. In the present study 400 rural youth on soya processing were trained and assess the economic status of these trainees who become self employed in soya processing. Processed products require less space as compared to raw produce, add value to the product and improve livelihood. Increasing income are always accompanied change into food basket (Gotait and Pradhan, 2006). A part from generating employment agriculture, food processing sector will directly generate employment opportunity in service sector (Khem Chand *et al.*, 2006).

Objective of the study :

The major objective of the study was:

- To find out the skills developed among rural youth in processing different crops.

- To judge the extent of ability in establishing processing unit.
- To assess the economic and social status after establishing food processing unit.

RESEARCH METHODS

In the study the three phases were planned.

Training:

Long duration (30 and 15 days) 16 trainings were conducted from 2014-2016. In each training 25 rural youth were selected on first come first serve bases. During the training 60-80 practicals and 60-30 lectures in 30 and 15 days training, respectively were given. In which Soybean, Garlic and Amla processing were taken as major subject. During training interested and ambitious trainee's skills were judged through observation and by introducing test paper.

Technical support:

After the training, interested trainee's have taken further technical support like using machineries, project development and planning, support of master trainer, frequent visit to previous entrepreneur's units etc.

Economic status of entrepreneurs:

To assess the economic upliftment of trainees after becoming entrepreneur, their success stories were compiled and feedback were taken.

RESEARCH FINDINGS AND DISCUSSION

In present study the following features were highlighted :

In the training programmes processing of Soybean, Amla, Garlic were taken as priority in demonstrations. Increasing health consciousness among the general people, the use of soybean is getting acceptance in the form of textured vegetable protein popularly known as Soya badi, Soya fortified wheat flour, Soya milk, Tofu and Soya curd etc. (Srivatava, 2011). The 18 products of soybean were learned by the trainees. For the assessment of trainees skills a written test was conducted after each training and it was found that out of 400 trainees 90% of them were highly skilled through subjective analysis only 8% were unskilled. The results also revealed that most of the trainees were having enough knowledge of food processing in regards to

Table 1: Development of skills among rural youth in processing different crops (n=400)

Categories	Subjective analysis		Observational results	
	Frequency	Percentiles	Frequency	Percentiles
Highly skilled	360	90%	160	40%
Skillfull	32	8%	260	50%
Unskilled	8	2%	40	10%

Table 2: Ability to start processing unit among rural youth through further technical support

Sr. No.	Technical support	No. of trainees	% of trainees
1.	Operation of machineries	120	30%
2.	Project development	83	20.75%
3.	Special help from master trainer	75	18.75%
4.	Frequent visit to previous entrepreneur unit	36	9%

method of preparation. It was also found that during training 40% have prepared the product at their home soon after learning and very next day brought it for testing to the experts, on that basis it could be observed that 40% were highly skilled and 50% of them were skilled and confident.

Table 2 showed that after training the interested trainees took technical support trainees (30%) again experimented the operation of machine and 18.75% refined their preparation with the help and standardized it in the supervision of master trainers. The product's, leveling packaging also done in the guidance of master trainer and Home scientist. Above 20% of the trainees took technical guidance in project formation, with approximate cost of unit establishment, machineries requirement, storage of raw material, capacity per month, labour requirement etc. Some trainers (9%) were very enthusiastic in establishing unit, So they also visited the

unit of previous trainers, They also got rough idea for land, electricity, labour, water, garbage management etc.

Table 3 reveals that 12 groups established Soya processing small scale units between the year 2015-17 and they generated average income Rs. 20000-80000 per month per person. The earning was not insured as daily work was not available in slack months like summer months, so the small scale industries change their life. These results support to the studies conducted by Kachru *et al.* (1998) and Singh *et al.* (2007). All of them established their own plant, 5 groups got subsidy on plant and all have financed the plant from bank. They all had FSSAI registration No. and Shop act No. The major contribution in their daily livelihood is the upliftment of social status as 15 members were invited from AIR, Kota to described their success, 27 of them invited frequently as Master Trainer in different govt. institutes, 27 entrepreneurs, success story telecasted at National

Table 3: Economic empowerment of youth after training / technical support / establishment of unit

Sr. No.	Name of the Entrepreneur and group leader	Name of unit	Average income per month/ per person (Rs.)
1.	Mr. Vikram Singh Hada	Bhavya Soya Products, Shivpura, Kota	50000-80000
2.	Mr. Gaurav Khandelwal	Riva Soya Paneer Plant, Rangbadi, Kota	20000-35000
3.	Mr. Ramgopal Kushwaha	Pooja Soya Paneer Plant, Borkhera, Kota	40000-30000
4.	Mr. Amirsh Chaudhary	Chambal Fresh Tofu, Vivekanand Nagar, Kota	70000-80000
5.	Mr. Asaram Gurjar	Shree Krishna Soya Paneer, Gram Hingotiya, Sawai Madhopur	40000-35000
6.	Mr. Sarvesh Prajapati	Shiv Food Product, Urai, Jhansi,U.P.	20000-30000
7.	Mr. Amandeep	Sunrise Soya Products, Chhawani, Kota	40000-30000
8.	Mr. Brij Bihari	Chambal Fresh Soya Paneer, Vivekanand Nagar, Kota	50000-60000
9.	Mr. Dinesh Soni	Chambal Foods, Nanta,Kota	50000-60000
10.	Mr. Surendra Hirwani	Harniwals Tofu, Jhunjhunu	50000-60000
11.	Mr. Subhash Saini	Maa Gayatri Paneer, Chomu	20000-30000
12.	Ms. Anita Saxena	Jarkhandi Balaji soya product, Station, Kota	20000-30000

Channel DD Kisan of T.V. and local channel. Local newspaper also highlighted their success stories.

Conclusion and Recommendation :

It can be concluded from the present study that although all types of processing of crops were learned by the trainees but majority of them started small scale industry is soya processing, reason might be soybean is the major produce of Hadoti region so that it is easily available and costing less. Therefore it can be recommended that processing is a better way of livelihood development so government may plan more programmes on food processing and value addition for removing the unemployment problem as well as to reduce national losses.

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