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MOTIVATION – A TOOL IN ENHANCING AGRICULTURAL PRODUCTIVITY IN DEVELOPING COUNTRIES

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Abstract – With the current Global crisis of increasing population, decreasing cultivable land and environmental pollution, agricultural production is getting a big hit. Particularly in Developing countries, the agricultural productivity is extremely low. Unless the productivity is increased it will be very difficult to cater the needs of present and future generations. At the same time it needs to be analyzed whether the farmers who are responsible for agricultural production are having enough motivation to achieve this task. Studies provide insight that younger generation is inclined towards migrating to cities to take up other profession leaving agriculture. If proper incentive schemes are introduced and farmers are motivated, there is a possibility of enhancing agricultural productivity. This paper aims in finding out ways of increasing agricultural productivity with special reference to Motivation.

Keywords- Agricultural productivity, motivation, agriculture, developing countries

INTRODUCTION

Enhancing Agricultural Productivity in developing countries has been the most important aspect in the agricultural sector in the recent years. Considering the present global population and the rate of growth of population, we are left with no choice than increasing our agricultural production. As the land available for agriculture is decreasing, again due to increasing population, increase in production can be achieved only through enhancing agricultural productivity. Several studies have been conducted to find ways for improving the production and productivity. Herath, 2010 found that between year 1950 and 1998, the world population has increased to 5.9 billion from 2.6 billion. Similarly, there was an increase of around 12% in food grain production. There was also a decrease of around 50% in the harvested area per person. These factors prove that the agricultural productivity has increased.

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But this increase is mainly due to technological advance in developed countries. According to him, the productivity in developing countries is extremely low. This is the concern for all and needs to be attended on most priority.

The student community and young generation are very much fascinated towards professions such as doctors, engineers, scientists, IT professionals and the like. Working in air conditioned atmosphere, attractive salary, city life, other fringe benefits are some of the reasons which lure younger generation to take up these professions. This makes the number of persons taking agriculture as profession lesser year after year. With due respect and regards to the above cited professions, it is to be noted that agriculture should never be neglected and all the above professions should not prosper at the cost of agriculture.

If the above conditions continue, the world will suffer for want of farmers and the whole human race will starve for food. Various studies have been conducted to improve agricultural production and productivity. Most of the studies are concentrating on improved methods of cultivation, use of robust technology, improvement in irrigation, hybrid varieties of crops, crop rotation, improving soil fertility etc. We have attempted to approach this problem from human willingness point of view. If farmers are motivated with various incentive schemes, they will get motivated to make huge improvement in production.

This paper aims at finding reasons for low level of motivation of farmers & young generation in developing countries towards agriculture and providing solutions to increase their motivation level so that increase in productivity in agriculture can be achieved.

CAUSES FOR LOW AGRICULTURAL PRODUCTIVITY

The agricultural productivity in developing countries is low due to following reasons:

- High Population growth
- Lack of knowledge among farmers about latest innovations in agriculture
- Poor health conditions of farmers
- Lack of good social organizations for farmers
- Following traditional methods of farming
- Small size of agricultural fields
- Insufficient irrigation facilities
- Uncertainty of rains
- Lack of proper reservoirs to hold water during excessive rains
- Faulty tenancy system
- Lack of usage of manure of good quality
- Lack of financial capability of farmers to sustain
- Declining fertility in soil

- Lack of proper plant protection scheme
- Lack of proper crop insurance schemes
- Lack of diversity of agriculture and food systems
- Lack of usage of latest innovations in the form of equipments and technology
- Changes in climate due to deforestation
- Poor handling and storage services during post harvest period
- Pests and diseases
- Lack of sufficient infrastructure
- High cost of farm inputs
- Lack of interest in youth to take up agriculture as profession
- Inadequate R&D in the field of agriculture due to lack of funds
- Polluted atmosphere (air and water pollution)

REVIEW OF LITERATURE

Review of literature was conducted on two themes ie Increase in agricultural productivity and Motivation of farmers. The review gave insight to the motivating and de-motivating factors of farmers in carrying out agriculture in developing countries.

A. INCREASING AGRICULTURAL PRODUCTIVITY

George Frisvold, et al 1994, found that if there is an increase in the stock of traditional inputs for agriculture such as labor, land and live stock, then there is corresponding growth in the agricultural output also. It means the number of persons taking up agriculture as profession should increase to yield desired results.

According to Chameides et. al ,1999, if we reduce the regional haze created due to air pollution, by adopting pollution control methods, there will be significant increase in crop production. This will enable developing countries to meet their current and future food demands.

A study by Ephraim Nkonya et. al, 2010, on agricultural productivity in nigeria found that the policies followed by Government, their strategies and their programs should always aim to accommodate the regional differences of a country. This will enable each region to increase their production and achieve high productivity and profitability. This will also enable them to follow proper land management practices.

For Ravinder Singh et al., 2010, enhancement of water use efficiency is the prime factor in improving agricultural productivity. This can be attained by properly selecting the crops and cropping methods based on the availability of water in the area, efficiently recycling the waste water from agriculture, reducing the water runoff there by increasing the moisture content of soil

and providing adequate soil fertility. They opine that better water management will help in increased productivity.

An article titled Enhancing Agricultural Production and Productivity (2012), discusses the steps taken by Government of Uganda to increases productivity in agriculture. According to the article, the Government through their agricultural credit will help the private sector to get funding for constructing warehouses and silos for improving storage facility. Further the Government would ensure availability of water for agriculture in addition to providing help for animal husbandry.

Lokesh Kumar Jat et al, 2015 are of the opinion that due to fertilizers being higher in price as well as detonating the soil can't be taken as a preferred option. But at the same time, organic manures are also not able to provide all the nutrients required for crops. Hence they argue that integrated nutrient management is the best way to enhance productivity.

Naspetti et al, 2016 states the following as the de-motivating factors which make existing agriculturists / farmers to leave agriculture and choose other profession:

- Very high cost of production
- absence of extension services and non-regulated chemical use
- agriculturists leaving villages and migrating to cities
- pollution of ground water
- lack of or absence of economic policy for external and internal market
- Government not able to provide financial assistance to the sector

According to a study aimed to Enhance Productivity of Agricultural and Fisheries for Food Security in ASEAN, which was conducted by OCED Global forum on agriculture, (2017), following reforms are to be carried out by ASEAN countries to enhance agricultural production

- Increasing public investment in R&D in Agriculture
- Greater public investment in agricultural infrastructure
- Reforms to land
- Providing finance help to short scale producers with long term and short term credits
- Better environmental governance

Abbas Ali et al, 2018, through a study found that short term credit loans to farmers has positive effects on the wheat production and increases productivity as the short term loans helps them to go for high quality seeds and also enables them to see the yield and benefits the same year.

According to an article by Tata Trusts, (2018) training by a project team has helped farmers in Uttar Pradesh to earn more income by growing onions.

An article published by Food and Ag policy in 2018 finds US farmers claiming that the soil which is healthy and water sheds are the prime factors for agricultural productivity. To meet the growing

demands of the society in terms of increased production, conservation of soil and water bodies is the only way.

B. MOTIVATION OF FARMERS

Motivation is the reason behind a person's desires, needs and actions.

Yan Ma et al, 2009, in a study, found that less enthusiasm for agriculture in local farmers is getting triggered mainly due to low agricultural economic efficiency. They also found that if the rural labor quality is poor, then it means a lack of local participation in sustainable agriculture. They opine that establishing reasonable market, education for young adults, two-way communication mechanisms, agricultural subsidy mechanisms, agricultural instruction that is effective and agencies imparting environmental education are to be developed and provided to farmers in China to improve their motivation level.

An article by Graduate Farmer in 2015 titled Passion + Motivation = Productivity states that motivation is the driving force for farmers in starting agro business.

Menozzi Davide et al, 2015, in their research found that motivation of farmers to adopt sustainable agriculture depended on similar positive steps from public authorities and supply chain leaders.

According to an article by Sanket Suman, 2018, in Economic discussion, proper transport facilities, institutional credit, marketing facilities, consolidation of holdings, proper land reforms etc. will also help in motivating farmers to enhance agricultural productivity.

WAYS OF INCREASING AGRICULTURAL PRODUCTIVITY

Productivity in developing countries can be increased using following methods:

- Use of new technology and modernizing of farming
- Cultivating short term crops
- Good irrigation facilities
- Creation of Social Organization for farmers
- Educating farmers about new technologies
- Using large size agricultural fields
- Motivating existing farmers by providing incentive schemes
- Motivating young generation to take up agriculture as profession

MODEL – MOTIVATING & DE-MOTIVATING FACTORS FOR FARMERS

Victor H. Vroom (1964) propagated Expectancy Theory. It projected that people chose how to act depending on the outcomes they anticipate as a result of their conduct. In other words, one decides what is to be done based on what one expects the outcome to be. For example a farmer may choose agriculture and work for longer hours in the hope of getting high production and good sales of his products. By considering this theory, a model has been developed. The farmer expects motivating

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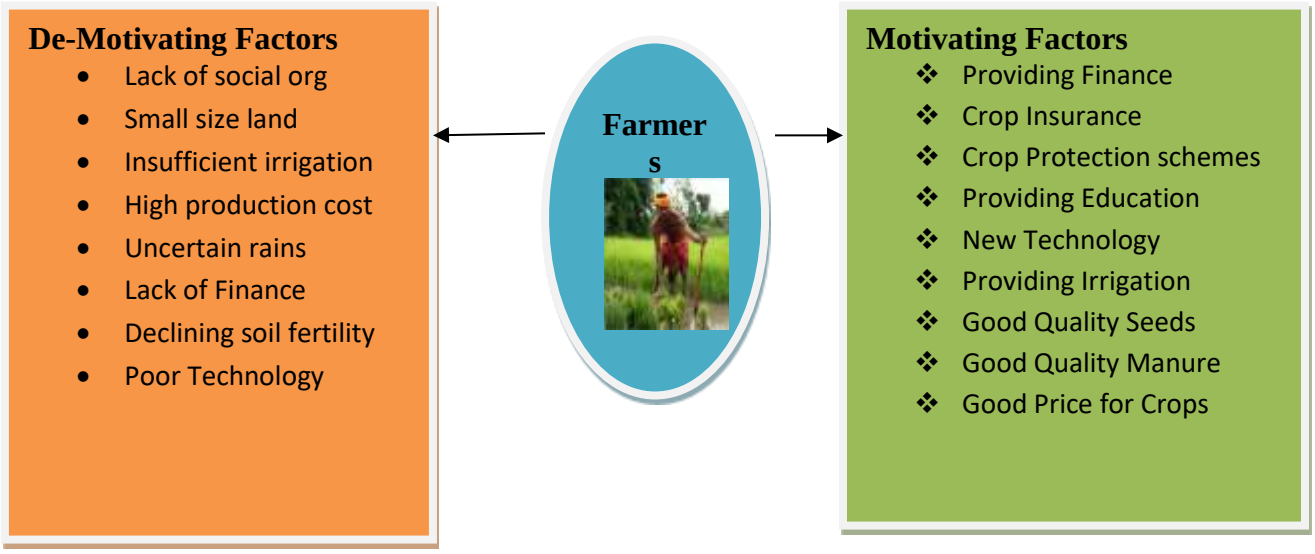
factors to be present in abundance and he doesn't expect de-motivating factors for him to continue with agriculture.

The following model provides a clear view on the motivation and de-motivating factors for farmers to take up agriculture and increase productivity. If the de-motivating factors are predominant, they will leave agriculture and migrate to cities in look for other jobs. If the motivating factors are more, they will tend to take up agriculture with renewed vigor and increase productivity.



CONCLUSION

Motivation has always been a highly effective tool in enhancing productivity. It has been established in various studies pertaining to employee satisfaction of various industries that motivated employees are more productive. In agricultural sector also, motivation plays a major role. It is right time for developing countries to understand this fact and take steps in the field of agriculture which motivate the farmers. To name a few, providing proper incentive schemes, financial support, crop insurance, assured purchase of their products with reasonable price, educating and helping them to use latest technology, organizing good irrigation facilities, supplying them with good quality seeds and providing crop protection schemes will motivate them to get motivated and enhance their productivity.

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