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Integrated Farming System A Viable Alternative To Conventional Farming In Attracting Unwilling Youth To Farming For Livelihood And Nutrition.

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Introduction:

Agricultural expansion is critical for improving farm productivity and translating into income growth. However, India's agricultural extension system faces many challenges. India's first priority is to revive its agricultural sector. But who will continue this main source of income? There may not be any farmers of the next generation remaining in the nation. Farmers quit their jobs per day and young people in rural areas don't show much enthusiasm in the industry. Even the vast majority of graduates from agricultural institutions change their careers. This profession does not attract young people, it does not have a guarantee of income and there are not enough institutions that offer work.

To supply the rising demand for products, agriculture needs an expanding workforce. Unfortunately, recent years have seen a sharp decline in agricultural employment. Because farming is a difficult and unrewarding job, young people frequently migrate to cities in pursuit of more exciting occupations. The study focuses on identifying the causes of the young's reluctance to work in agriculture and address the issue of how the youth should engaged into the agricultural sector. In general, older farmers are thought to be used to conventional agricultural practices and methods, and it is conceivable that they will be hesitant to implement new technology or innovations on their farms. The necessity to recruit young people to engage in agriculture has been reinforced by the findings. Making agriculture more vibrant and interesting than it is now is vital to entice young people to work in agriculture. Furthermore, it is necessary to influence young people to regard the industry more favorably than they already do. According to some studies, youngsters continue to make up a significant portion of the agricultural work force and have the goal to modernize agricultural methods and use new technology to promote agricultural growth. The kids are

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crucial in today's society because they will determine the future of sustainable agriculture and food security.

The scholarly community, policy makers, farmers, and practitioners who are looking into the prospects for integrating young people into the agricultural workforce need to promote and highlight the opportunities to improve income , food security and income in the Integrated Farming system(IFS) model.

IFS an alternative to conventional farming for livelihood and Nutrition:

With the diversification in land use agricultural land is limited and scarce. There are no opportunities to increase farm income, family food security and employment through crop production alone. Now the question arises what are the opportunities to improve income and food security? The answer could be an integrated farming system where livestock, poultry and piggery play an important role and can improve the nutritional status of farm families.

Indian agriculture is dominated by a large number of small farmers with scattered farms on marginal lands. Lack of adequate capital for investment was the biggest obstacle that caused a decline in agricultural production. Therefore, production must be diversified and crop production must be integrated with the production of valuable goods such as milk, meat, fish, fruits and vegetables. As there are risks and uncertainties in agriculture, especially for high-value commodities, a farming systems approach should be discussed for Indian farmers. This would take into account the complementary of all natural resources for high productivity, sustainability, profitability, better nutrition and low production costs. The reliance of farmers on livestock as an alternative source of income to farming is immediate.

Indian agriculture is characterized by mixed farming, where crop production is combined with one or more livestock enterprises such as cattle, sheep, goats and poultry. Here, the farmer usually designs his farming system to not only maximize net income, but also to integrate family well-being into family nutrition, risk avoidance and secure income for his business. A farming system that includes many businesses such as agriculture, dairying, poultry, horticulture and farming can help a farmer achieve regular and secure employment opportunities throughout the year and increase farm income.

Integrated Farming Systems have the following goals and opportunities:

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Agricultural enterprises include agriculture, breeding, poultry, fish farming etc. A combination of one or more business in agriculture, if carefully chosen, planned and executed, will yield more dividends than a single business, especially for small and marginal farmers.

Provide constant and stable income system and productivity improvement. To achieve ecological balance in agriculture by reducing the accumulation of pests and diseases, using a natural agricultural system and reducing the use of chemicals (inorganic fertilizers and pesticides) to provide society with chemical-free healthy products and environment.

In IFS waste material of one component can be used at the lowest cost. Thus, reducing production costs and combining the utilization of residual material, eliminating the intervention of intermediaries in most of the inputs used. IFS can support balanced food by combining the components that are versatile in nature, allowing us to produce different sources of nutrition. It also helps in Environmental safety, waste materials are effectively recycled by combining appropriate components, which minimizes environmental pollution. Due to the interaction of enterprises with crops, eggs, milk, mushrooms, honey, silkworms etc which ensures cash flow to the farmer throughout the year. Large farmer takes full advantage by adopting new technology and create linkage between various components like Dairy, Mushroom, Agriculture, Vegetable. Money flow round the year gives an inducement to the small farmers to go for the adoption of technologies which enhance productivity. Most of the marginal farmers in India confronting the fodder crisis. Every piece of land is used efficiently. Plant perennial leguminous forage trees in field edges and also fix aerial nitrogen. These practices greatly alleviate the problem of lack of quality feed with an animal component. Merging agriculture and animal husbandry would greatly increase the labor demand and help to a large extent to reduce the problem of underemployment. IFS offer enough opportunities to use family members to work throughout the year.

Issues and Concerns with Integrated Farming Systems:

The high start-up costs may constrain farmers from switching to integrated farming and from exploiting the benefits of resource integration. Poor farmers are not able to invest more capital as initial investment as a constraint since there is need of immediate economic returns to meet their food requirements, family expenses and loan- repayment. The lack of animal

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feed throughout the year and unavailability of labour in needy times are the major production constraints in IFS. High start-up costs can prevent farmers from switching to integrated agriculture and benefiting from the integration of natural resources. Lack of animal feed and lack of labor during periods of scarcity are the biggest production constraints of IFS. Procuring the improved breeds of livestock, timely availability of fish seed and feed, low cost energy efficient pumping machine, information on government schemes and credit support from financial institutions. Acquisition of improved animal breeds, timely availability of fish seed and feed, affordable energy efficient pumping machine, information on government programs and credit support from financial institutions. Lack of scientific knowledge on rearing of animals, unavailability of improved breeds in the local markets and lack of financial support respectively. With the new world trade situation, where agricultural and export subsidies have been reduced, the cost of imported food is rising.

Measures to attract the youth and enhance IFS model:

Agricultural students should utilize their knowledge in practical agriculture to start farming and utilize appropriate seeds, machinery, and management techniques. The largest sector in India, agriculture, is undervalued and needs improvement. Governments should develop systems for marketing and supply of fertilizers and pesticides, ensuring farmers receive the right advice. Increased scholarships for agricultural students can promote research and development, improve earning power, and strengthen professional status. Additionally, youth should be taught profitable farming techniques, including integrated agriculture, mushroom cultivation, freshwater aquaculture, and dairy farming. Subsidies or loans should be provided to help young people set up food processing units, reducing transport costs and providing employment opportunities.

Conclusion:

India's agricultural sector faces challenges due to declining employment and a lack of young farmers. The Integrated Farming System (IFS) model, which combines crop production with livestock enterprises, can improve income, food security, nutrition and employment opportunities for farmers. However, high start-up costs, poor capital investment, and production constraints like animal feed and labor can hinder IFS adoption. Subsidies or loans should be provided to help young people set up food processing units, reducing transport

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costs and providing employment opportunities. Incorporating young people into the agricultural workforce is essential for sustainable agriculture and food security.

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