PROBLEMS AND PLANNING FOR SOCIO-ECONOMIC DEVELOPMENT: A CASE STUDY OF RANGRA BLOCK

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Abstract

It is explicit that the existing resources of the study area are neither properly exploited nor are sufficient to raise the socio-economic status of the inhabitants to the degree of satisfaction. Agriculture which is the mainstay of population faces some acute problems. Another important source of livelihood is small scale and agro-based industries in the area. It has not only brought the employees and their dependants on the verge of starvation, but has also adversely affected the socio-economic condition in particular and the study area in general. Neither the line of communication has developed. All these factors and many others caused by the growing population force the district to breathe under these socio-economic crises. On the other hand, the population of the study area is increasing every day and is projected as by the next 20 year, i.e., by the year 2021. Naturally, it will need more food, clothing, shelter and other necessities of life. If the problem of population growth are allowed to continue unabated without any definite solution and proper planning, it will certainly create regional imbalances and a time is to come, when the entire socio-economic structure of the region will completely collapse.

Keywords: Socio-economic, Communication, Agriculture, Crops etc

Introduction

Its different aspects have been examined and its assets and liabilities have been evaluated. The level of education and standard of living in the entire rural areas is very low. Rural areas are backward from all points of view.

Problems of natural resources have recently been viewed more and more in terms of what they mean to people, indicating increased recognition that the Country’s greatest resource is people. As said by Whipple “A nation’s true wealth lies not in its lands and water, not in forests and mines, not in flocks and herds, not in its dollar, but lies in its healthy men, women and children”. A planned approach to the utilization of human resources is needed for an integrated development of the area.

Problems of Landuse and Agriculture

Agricultural practices of the region experience a lot of problems every year. Flood disaster appears every year that proves to be a curse in the study area. Mass poverty and conservatism of the people, particularly of farmers in the region are not better than a curse. The farmers are practically illiterate and often, fail to understand the modern agro-technologies as well as the significance of intensive and commercial farming. About 85\% of the farmers in the area performs their agricultural practices on the traditional pattern. Besides conservatism and illiteracy, agriculture often remains the victim of mass poverty. The farmers fail to realize the cause of agricultural problems. So, they are unable to strike at every root of the problem.

The farmers of today are not only experiencing slow-down in agriculture productivity vis-à-vis high input costs, increase in wage rate of labour and other marginal cost (Narayananmoorthy, 2017)\textsuperscript{1} but also the technological fatigue, low seed replacement rate, inadequate credit supply, inefficient market access facilities to the farmers (local market for HYV are thin), unbalanced use of fertilizers, low level of public investment, degradation of land and water resources, stagnated Net sown area (Singh, 2007)\textsuperscript{2}. Moreover, agriculture sector is also facing a number of constraints like, declining total sector productivity (Shivay \textit{et. al.}, 2010), rural indebtedness, (Dwarkanath, 2010)\textsuperscript{3}, fragmentation
of land, erratic based industry, illiteracy, lack of training, host of diseases and pests and decrease in investment in agriculture sector (Hazra, 2001)\(^4\), lack of infrastructure like poor road network, transport, cold storage and processing infrastructure (Birthal \textit{et. al.}, 2006)\(^5\), deterioration in soil health, depleting of water table inefficiency in technology transfer, lack of investment in post harvest technologies, decline in the gross capital formation in agriculture sector (Birthal \textit{et. al.} 2008), poor power supply, dismal rural credit scenario (Patel, 2010)\(^6\) and volatility of markets caused by the increasing global integration. In addition to many arguments emerged as the cause of stagnation in agricultural growth including technology and policy fatigue, incomplete agricultural growth including technology and policy fatigue, incomplete agricultural transformation and higher level of specialization (high dependence on wheat and rice cultivation) and declining public support (Desh Pandey, 2007)\(^7\) have made agriculture an uninviting and loss-making venture.

Many prevalent evils also contribute to the agricultural backwardness, illiteracy and the poverty of the peasants in general have brought the miserable economic backwardness. As a matter of fact, the illiterate farmers can not give due care to cultivation, the major source of livelihood.

Farmers are so poor that they can not purchase even the essential implements of farming. They have severe lack of capital to invest in cultivation. The farmers can not think of costly modern machineries. The social setting has given rise to landless labourers. Until or unless a coordinated attempt is made to tackle the problems on all the fronts, the scene will not change.

**Cropping pattern**

The pattern of cropping in the district is of subsistence type. There is a very high premium on the food crops as usual and over around 95\% of the total cropped area is devoted to such crops including pulses in the district, while non-food crops occupy less than 4\% of the total cropped area. Among the food crops, cereals contribute highest followed by pulses, oil seeds come next to the total cropped land. Other crops contribute less while some area is devoted to vegetables, fruits, spices and other crops.

**A comprehensive planning for development of the region is grouped under the following heads :**

1. Landuse planning,
2. Planning for development for socio-economic infrastructure,
3. Planning related to population pressure,
4. Planning for industrial development.

**Land use planning**

Land use planning is essential for a country where majority of people live in rural areas and the economy of the country basically depends upon agriculture. About 80\% of the people of the area lives in villages. The growth of population is fast leading to acute food shortage, growing unemployment and rural-urban migration. The significance of land use and agricultural planning has been realized by scholars so that the proper use of land can enhance the food production and the development of agro-based rural industries and check rural-urban migration.

Geographers and scholars of other disciplines have tried to chalk out the schemes and suggest the plans for maximizing agricultural production by proper utilization of land. The community Development programe is a step by the government in this direction. But this has yielded very little result. This, rural planning especially in the field of agriculture can be better executed with the help of land use survey. In fact, landuse planning is in essence the determination of the optimum use of every acre of land which must by elastic and can change from time to time to adopt the changing conditions.

The planned land use refers to the use of each piece of land for the purpose for which it is best suited in a manner that the soil improves fertility or at least a balance is maintained between the annual loss of fertility and replacement by natural and artificial processes like crop rotation, silt deposition and by the use of compost and chemical fertilizers.
Land utilization is a comprehensive expression connecting the use of land, inland water and mineral resources of a region in such a way that it fulfils the following objectives:

(a) Maximum exploitation of land area available, and

(b) Rational distribution of that area among various uses of land by preference on the one hand to the use for which a piece of land is best suited and on the other hand national urgency and demand for the products of a particular use. Agricultural planners hold the view that the scope for expanding the cultivated area is now very limited. The only remedy is to increase yields to solve the growing food problems. In addition to maximizing the production attempts should be made to locate the vacant land, land capable of reclamation, consolidation of holdings and development of marshy and unirrigated land and other misused land for proper utilization. In this process relocation of settlement and re-construction of roads and streets may be preferred from the point of view of developing settlements on unproductive vacant space and procure vacant space along roads and streets. Unproductive land can be reclaimed for agricultural use. Marshy land can be made by providing irrigation and fertilisers available either by draining out the accumulated water or by filling the land with garbage and soil of the upland areas.

Before going for the planned development of land use it is necessary to analyse the land use problems and suggest measures for their solution. A comprehensive planning for the development of the agriculture is required. Planning should be based on the careful preparation of local land use survey. In rural areas, a sound land use plan is a basic part of agricultural policy. Land use planning has the following main objectives:

(i) To grow more crops in quality and quantity.

(ii) To extend soil management.

(iii) To expand the area of cultivation by using barren and cultivable land, sowing current fallow and other fallow land and by maintaining balance in various uses of land.

(iv) To give more stability to desirable land use.

(v) To make all round development or integrated rural development through better use of land by undertaking other economic and welfare measures.

Planning for agro-industrial development

Planning related to the industrial development in the study region includes both the invigoration of the sick and old industries and opening of the new one, following steps should also be taken in the form of industrial development plan of the region under reference:

(a) Small scale and cottage or village industries such as iron grills, steel furniture, rolling mills, etc. Be encouraged and set up at least at block/panchayat headquarter.

(b) Agro and forest based industries such as rice, flour, oil milling. Gur making, food processing, wooden furniture making be promoted in every village having a population of 1,000 persons or more.

(c) One big centre each of dairy and poultry be set up at block headquarters with its sub units at every panchayat headquarters to meet the requirements of milk and eggs of the inhabitants.

(d) Financial assistance be provided to the young and needy entrepreneurs for the construction of a granary house where the farmers can store their grains for selling them at proper time; a cold storage for keeping the potatoes, green vegetables, perishable goods etc.

Thus, it is clear from the above discussion that the agro based industries at block/panchayat headquarters would go a long way to diversify the agriculture in its wake. Only then the prospect of agriculture will be bright and it will bring happiness for the people in the area. Agricultural problems and measures for solution

The analysis of various aspects of the topography, general land use pattern, agricultural land use and production of crops has revealed that there are a large number of problems facing the agriculture of the region. These problems are necessary to be solved for successful development of the region. These agricultural problems can be grouped into the following:
(i) Problems related to terrain and river basin

(a) Relief is the fundamental factor in shaping the general pattern of land use in any region. In Rangra Chowk C.D. Block, there is an expanse of diara land surface caused by Ganga and Kosi rivers. As such, there are lowlands which remain water-logged for several months and become unsuitable for agriculture. Such areas can be developed into good arable land by providing drainage facilities or by filling the land by getting soil from upland areas. This process will also increase the productive capacity of the upland area. By transporting fertile soil and mixing them with infertile soil. Even in kewal soil or clay soil a little proportion of fine sands can be useful for changing the kewal soil to doras soil. Such soil becomes suitable for potato, wheat, sugarcane, vegetables etc. Abandoned courses of rivers have unproductive sandy soil which are used for growing water melon and remain vacant in other seasons. The fertility of this soil can also be improved be mixing fertile soil and providing irrigation.

(b) This region has been under cultivation for several centuries. As such, the soils have lost some of the elements required for successful production of crops. These soils require chemical analysis and addition of compost or chemical fertilizer for the restoration of those elements. Thus, it is necessary to take sample soil from agricultural fields to the soil laboratory for chemical analysis. On the basis of this analysis, suitable measures and fertilizers should be provided.

(c) In certain areas, problems of soil erosion are found. Soil erosion can be checked by avoiding deep ploughing by management of water and by planting trees.

Problems concerning fertilizers

(a) Inadequate supply of fertilizer is an important problem concerning the farmers. Sometimes, they purchase it in black market and pay heavy price, but sometimes, fertilizer becomes out of market when it is required. Farmers should be given adequate supply of chemical fertilizer by the government. The government should manage the distribution of fertilizer in such a way that farmers are able to get it regularly.

(b) Farmers of the region are not aware of soil testing facilities and proper use of fertilizer. The government should employ technical staff to collect soil sample from villages for analysis and suggest the use of proper fertilizer. Amount of fertilizer also needs attention because its over-dose becomes harmful.

(c) Farmers do not make proper use of compost. They spoil the cow dung and use it as fuel. They should take proper care in keeping the cow dung in the ditch to prepare the compost. The compost should be used at appropriate time in the field. Sometimes, farmers spread the compost in the field before rainy season which is washed away with the rain and its value for maintaining the fertility is minimized.

Farmers are also not aware of the use of bio-gas. In fact, cow dung can provide gas for light and fuel as well as good compost. Farmers can form small group to produce bio-gas and make use of it.

(d) Green manure is considered harmless for the field and useful for production of crops but it is not so popular in the region. Only a few farmers make use of the plants of dhaicha, Sanai, Urad etc. as green manure. The main problem behind this is that it needs either early rain or irrigation to grow these plants. In this process it involves expenditure in terms of irrigation and ploughing and consumes time. As a result, farmer prefers chemical fertilizer or compost instead of green manure. These problems can be solved by developing irrigation facilities and enabling the farmers to grow these plants. At the same time farmers should be taught about the importance of green manures by agricultural supervisors.
(iii) Problem concerning irrigation

(a) This area has insignificant proportion of canal irrigation the existing perennial rivers particularly the Ganga can also be used for storing rain water by constructing sluice gate and irrigation channels can be developed on both sides of rivers. This will help develop pisciculture as well.

(b) Ahars and pynes in the villages become dry after rainy season. Some of these ahars have been encroached by farmers. If these ahars are developed as reservoir by digging the soil and constructing bundh, this can help farmers to irrigate standing crops when Hathia rains fall. This will also help in pisciculture.

(c) The tanks of this region are also uncared. Due to siltation, these have lost their depth and water storing capacity. As such, they dry up in summer. This problem can be solved by removing the soil from these tanks, so that stored water can be used for irrigation at the time of failure of the rain. These can also be used for growing Singhara, Makhana and pisciculture.

(d) The district has also considerable number of state tube-wells. Unfortunately, most of these tube-wells are either mismanaged or out of order. The government authorities should see the proper construction of state tubewells at proper place, proper functioning of the state tube wells and proper distribution of water.

Private tube wells are facing the problems of water level as it is going downward and proper supply of water is not available. This problem can be solved by digging these wells and by providing borings.

(iv) Planning for extension of cultivation

In natural environments, land is seldom free from its hazards, such as distance between sites, climatic extremes and competition between various forms of life. In such circumstances, the gifts of nature can be made available to human use only when these hazards are overcome.

Experience has shown that with human efforts, the natural environments can be modified and the productivity of the land can be increased. Side by side, the area under cultivation can also be increased but to a limited extent.

Planning for socio-economic development

Developmental suggestions related to the social, economic and cultural aspects of life, such as transport and communications, public health, educational level, etc. are incorporated under this head. All such suggestions, in the form of planning for socio-economic changes, are mentioned here under:

1. As regards road communication, the southern portion of the area needs further development and extension. Besides, each and every settlement be connected with the main road either directly or through the link roads for quick transportation of both passengers and goods, as well as for the easy movement of agricultural produce from fields to the dwelling place and the granary house and from there to the market.

2. Existing line of transport and communication be properly maintained and as far as practicable the existing unmetalled road on priority basis. Besides, the block headquarters be connected with metalled roads from the panchayat.

3. So far as public health is concerned, a maternity-cum-dispensary centre equipped with medicines, trained nurses, midwives, and bed facilities be opened in every village having a population of 500 persons or more. This will not only provide medical aid to the needy persons but will also educate the general public about the ways and means for keeping a sound health. The block medical officer, in charge of such medical centers, should pay regular visits for the proper functioning of these centers. Besides, hospital facility be provided at every block headquarter. Moreover, the public Health and Engineering Department of the Government of Bihar should take all possible efforts to provide drinking water facility which is really a glaring problem in rural areas. This facility will have to be extended in each and every inhabited village as well as in the rbaran centers. Sanitation is another problem for which local bodies in co-operation with public in general should work hand in gloves not only in clearing off the garbage, drains, roads etc, but also in education the general masses to how one can lead a healthy life. All these steps will certainly improve the public health in general to a great extent.
4. With regard to educational level, the percentage of literacy among females is much below than the males. To remove this anomaly as well as to raise the educational level of the adults, one education centre on a population of every 500 persons and part thereof be opened. As regards the persons of school and college going age groups, the educational institutions be opened on the ‘distance-cum-population’ basis which is as follows:

(a) One primary school on a population of less than 500 persons and or a distance of less then 2 kms.
(b) One Middle school on a population of 600 to 1000 persons and or a distance of 2 to 4 kms.
(c) One High school on a population of 1000 to 2000 persons and or a distance of 4 to 5 kms.
(d) One inter college on a population of more than 7000 to 10,000 persons and or a distance of more than 05 to 10 kms.
(e) One Degree college on a population of more than 15,000 persons and or a distance of more than 20 kms.
(f) Extension of job oriented education and training centres for technical training is also essential.

The construction of a community-cum-recreational hall in every inhabited village of the study area will not only help in raising the literacy rate among the rural people but also promote the feeling of self protection and natural co-operation among them. But for this, the Government will have to come forward with financial assistance. The Govt should canvass about its utility through different media of Communications and encourage the villagers to contribute 50% of its total costs. To make it more attractive, arrangements, of newspapers, magazines, indoor-games, etc. should also regularly be made on the contribution of both, the government and the villagers. The said community-cum-recreational hall should be under the charge of a villager who will be responsible for his act of omissions to the concerned Block Development officer.

If the aforesaid plans are executed with full sincerity it will certainly improve the socio-economic fate of the population growth to a great extent.

References: