

Chapter-9 CONCLUSIONS

9.1 SOME IMPORTANT FINDINGS

9.1.1 At the outset of this conclusion we like to divulge that our study has brought into the open important points about the use of basic recourses like land and labour at the area economy of Banewar. From the point of view of land use intensity it has been seen that a reasonable amount of land remains outside of the proximity of cultivation. Land intensity values according to our three methods justify this. All are given in table 8.16 in chapter 8. At the same time, as per the title of our write-up we suggest for grass-root planning, the land reserve available for further planning makes up as much as 40 per cent of the gross cultivable land. This amount of land can be used for further use in the course of future plan. Again from the point of view of labour use intensity one can notice from table 8.17 that the existing utilisation of labour power is far off from the optimum utilisation. What is seriously bound us to think that the adult women are far from the employment operational net-work at this grass-root area economy. Nearly 40 percent employed female adults have been succeeded to make use their labour power for 100 days and less only in an agricultural year. This simply permits us to say that the nature of activities throw open by this area economy is not suitable for the female workers.

9.1.2 The existing agricultural infrastructure available is far-off ~~the~~ from the level that has been required for smooth development of an agricultural sector. We mention here especially the case of irrigational facility. It is revealed very cleanly from our study that due to inadequate irrigational infrastructure the farmers of this area economy are rather failed to introduce multiple cropping practice even after the call for a second green revolution in eastern and north eastern area of our national economy. Not only that the public irrigational enterprises, so far have been developed in some areas, releases cost benefit in a very significant manner, as has been shown in chapter 5. Public enterprise for irrigation operates in village 2 and the per acre irrigation cost is Rs. 248.72, while in village 1 this cost amount increases as much as to Rs. 493.19 and here entire irrigational network is privately managed. Obviously the cost difference is nearly double.

9.1.3 One interesting point that revealed from this study that the area economy under our preview is trying to leave its traditional subsistence character. This has been reflected through the amount of land given in potato cultivation. One-fourth of the gross cultivated area was given to this potato cultivation during the last agricultural crop-year. This kind of crop diversion no doubt releases the signal of farm efficiency at the grass-root level. If we make a comparison among the farm income obtained from different crops then we also see that the crop potato emerges as the highest farm-income giving crop irrespective of cost differences as determined by us. On the other hand the two lowest farm-income giving crops of this region are Aus paddy and Jute, although the home labour co-efficients for these two crops are consistently very high.

9.1.4 We can easily strengthen our finding that we have made in the preceding paragraph by put forward the figures of yield rates of our sample economy. The yield rates are very low in our sample economy. This may be due to high-cost theorem (input market shocks) facing by the decision making units because of the high input-values or may be due to output market shocks. So it should be the compulsory duty of the republic to assure the farmers that they have been obtained the necessary inputs as and when it required in the production process at a fair price as determine by the Republic. On the other hand, output market of agricultural product should be such that none of our farmer left in the market with their produce at the end of the market tenure. So our short term plan as well as our long term plan depends very much on the guarantee of fulfilment of the above stated two conditions.

9.1.5 This study has revealed beyond doubt, as follows from chapter 6 that irrigation water and organic manures are being appeared as most important agents of additional production in agricultural sector. Although the value of the marginal productivity in case of inorganic manure is being positive but the entire credit has been hijacked by the potato production itself. Thus overall performance in raising crops is still lagging behind the two production agents just we mention in the previous sentence. But what is most important to be noted here is that farmers of this grass-root area economy have been failed to use properly their family labour in the proecess of production. The negative value of the marginal productivity of

home labour permits us say that the home labours are disguisedly unemployed or rather irrationally used in the process of production. On the other hand, the negative co-efficient value of seeds is highly indicative and intimates us about the absence of organised seed market in the one hand and low quality seed variety used in the production process on the other hand.

9.1.6 Another interesting point releases from our study is that the easy and cheap availability of production agents does not guaranteed to be appeared as an important production agent. The availability of irrigation water in village 2 is easy and cheap but the marginal productivity of irrigation water is consistently high in village 1 rather than village 2. In comparison between tables 6.2(a) and 6.3(a) one can easily come to the conclusion that a good organic base along with the irrigation base can overruled the illusory advantage of inorganic manure in the production process.

9.1.7 Although as per our assumptions we have taken only 33 farms to test the efficiency of the decision making units at the individual level, still this efficiency analysis releases some important signals for future planning in a decentralised manner. One can receive some signals from table 7.1 where the percentage of efficient DMUs is consistently high in all the three crops under our purview. But what is interesting is that and whatever may be the reasons, in the course of time farmers of our sample economy make them free from the illusion of toxic tobacco production. Further, the efficacy of the farmers of this area economy can easily be increased simply by using two production agents namely home labour and organic manure in a little bit managerial manner instead of traditional manner.

9.2 RECOMENDATIONS

9.2.1 We recommend for the set-up of organic base for this area economy and also for other like area economies. The reasons behind this recommendation are, in the first place, it is cheap and easy available. In the second place, its mode of supply is being controlled by the decision making units itself and finally, it is not harmful to land fertility. Further, the concept of one straw revolution of Masanabu Fuzuaka, the ultimate destination of our future agricultural production, can also be

justified with the development of organic base at the each and every grass-root area economy.

9.2.2 Our recommendation highly highlighted about the formation of proper input and output market complex in such a manner that in the input market each and every decision making unit can able to purchase any amount of their reproducible agent freely at a fair price and none of our production unit can stay in the output market with their produce in unsold condition at the end of the market. Both the markets should be regulated in such a manner that unethical exploitation that exists at present in both markets in different forms should be removed.

9.2.3 There is no denying that inorganic manure is an important production agent in our agricultural process irrespective of its regression co-efficient and marginal productivity. It has been injected in mind of our farmer's chemical fertilizer boost-up agricultural production. Under this circumstance we recommend here for a regular and rigorous training of the farmers about the proper organic and inorganic mix that should be used in the process of production. Further, proper training should also be needed to aware the farmers about the use of proper dose of growth promoters and use of other insecticides and pesticides.

9.2.4 The river Ghargharia goes through the north-east side of our sample village 2 by creating a natural boundary. This river has huge riverbed remained dry during the months November to June. This huge riverbed area can be used for the production of watermelon. We recommend for this crop production for two reasons. Firstly, the production period of watermelon is such that it can cover the traditional gestational period of traditional agriculture by providing some amount of employment days to the labour folk who remain unemployed during that period. Secondly, the home labour co-efficient is substantially high in watermelon production (Kar, 2013). Further, the farm income in watermelon production is also very high in comparison to any traditional crop of this area economy.

9.2.5 We also prescribe for the strawberry production to boost-up agricultural income of the farmers of this area economy. Though strawberry production, at present,

remains in nebulous form but we are in hope that in the coming future it will be an important alternative in our agricultural crop content.

9.2.6 If the proper execution of the plan is being made as per our prescription, we hope that agricultural production, particularly vegetable production, will increase at least three fold in forthcoming future. Thus we recommend for the establishment of food processing unit at this grass-root level to release both the employment and income facilities in the one hand and to absorb the additional vegetable production to cope with the threat of price falling.

DIFFERENT FORMULA WE HAVE USED IN DIFFERENT CHAPTERS

Chapter-4

1. Mid-year population = Population— $1/2$ (Total Births—Total Deaths)
2. Death Rate = $(D/P) \times 1000$;
Where D = No. of deaths during the last year
P = Mid-year Population
3. Birth Rate = $(B/P) \times 1000$;
Where B = No. of births during the last year
P = Mid-year Population
4. Infant Mortality Rate = $(D_0/B) \times 1000$;
where D_0 = No. of deaths below age 1 year during the last year
B = No. of live births during the last year
5. General Fertility Rate = $(B/P_i) \times 1000$;
Where B = No. of live births during the last year
 P_i = Mid-year population of women between the age group 15-50
6. Gross Reproduction Rate = $(B_i/P_i) \times 1000$;
Where B_i = No. of live births of mothers in the i-th age group
 P_i = Mid-year population of women between the age group 15-50
7. Net Reproduction Rate = GRR \times Surviving Rate;
Where GRR = Gross Reproduction Rate
Surviving Rate = (No. of surviving children/ No. of children ever born to married women)

Chapter-5

1. a) Cost A = This cost includes all the costs on fixed and variable inputs except the cost of home labour.
b) Cost-B = Cost A + cost on home labour
c) Cost-C = Cost B + the amount of interest incurred for using of investible funds in an agricultural crop year.
2. a) Farm Income-A = Farm's Receipts per Acre – Cost-A
b) Farm Income-B = Farm's Receipts per Acre – Cost-B
c) Farm Income-C = Farm's Receipts per Acre – Cost-C
3. a) Yield Rate-A = Farm's Receipts per Acre \div Cost-A

b) Yield Rate-B = Farm's Receipts per Acre \div Cost-B

c) Yield Rate-C = Farm's Receipts per Acre \div Cost-C

Chapter-8

1. Work Participation Rate = Ratio between the working populations to total population during the reference period.

2. a) Land Intensity Index-I = Ratio of no. of days the plot was put to use to the total no. of days in an agricultural year.

b) Land Intensity Index-II = Ratio of Gross Cropped Area to Net Cultivable Area.

c) Land Intensity Index-III = Ratio of no. of crops raised actually in a plot of land during the agricultural year to the total no. of crops could be raised during the same year.

3. Labour Use Index = No. of days a labour is employed in a year \div 330

Where, 330 man-days of employment in a year is considered as full employment.