CHAPTER X

IMPACT OF THE PROGRAMME ON AGRICULTURE

AND ANIMAL HUSBANDRY

Need of the Study of the Impact:

Since independence, food problem has been causing serious anxiety to the Government and distress to the people at large. It is now a common knowledge that agriculture has been assigned a place of pride in community development programme. Schemes like the use of improved seeds, adoption of line sowing, use of fertilisers and pesticides etc. are to the fore of the block agriculture programme.

In the context of the grim food situation prevailing in the country, the question is frequently asked whether the programme has contributed in any way to stepping up food production in the country and it has been of any help to the farmer. So much effort resources and attention has been concentrated on community development with high hopes in recent years that it becomes quite essential to study the impact of agricultural activities of the programme on the farmers especially towards increasing the per acre yield. In the last chapter the different kinds of agricultural programmes of the blocks have been analysed in details of all the area under study. On that basis it would
be easier to measure the impact of the same.

When the C.D. programme was launched in 1962, the sincere hope of everyone was that it would be able to handle some of the basic problems of rural India and in that process some of the country's major problems such as food, agriculture, and industries would, by and large, be solved.

In general, the statistics compiled by the block officers present a rosy picture about the progress achieved in different fields, but what one meets in the field is but a diluted version of the one quoted in the statistics. The following pages explain the impact of the agricultural activities in the area.

Beginning with the main problems in the agriculture, it would be worth while to see to what extent the same have been solved by the various programmes. It is needless to say that much stress had been laid upon increasing the irrigation facilities in rural areas through major and minor irrigation projects. But still today it remains the major problem in the villages. In the survey 66.6% of the farmers cited shortage of irrigation facilities as their main problem though there are other problems also. It clearly demonstrates that there has been negligible impact of the expansion of irrigation facilities in the rural areas.

**Improved Seeds:**

One of the basic principles of good cultivation is to sow improved high-yielding seed which secures higher per acre output. The major bottleneck in saturating the entire cultivated area by improved seeds is the non-availability of such seed and proper organisation at the village level for multiplication and
distribution under control. In the blocks surveyed, there was only one seed multiplication farm in Jabera block though according to the M.P. State Third Five Year Plan 2 farms in Jabalpur district, one in Sagar district, two in Narsingpur and two in Damoh district were proposed to be established and completed. Though a detailed study of these farms has not been made in the present survey it is worth while to quote from the report of P.E.O. that the Third Five year plan of Government of India states that a field study of the multiplication and distribution programme for improved seed undertaken by the P.E.O. has revealed a number of weaknesses in the existing situation and in the working of seeds farms.

The survey reveals that wheat and paddy are the main improved seeds used by the cultivators. About 70% of knowledgeable persons believed that improved seeds resulted in the betterment of both yield and quality of the produce. About 12% of the farmers who did not use the improved seeds told that the same was not available in time and 18% per cent replied that they were not in need of improved variety as they were having their own seeds. It shows that the use of improved variety is not governed as much by the purpose of bringing in use improved variety as it is with the motive of making the seeds available. This is why a fraction of improved variety of seeds is directed towards family consumption. More emphasis must be laid upon its essential use. The use of improved variety of seeds is also limited as the farmers are required to repay the same in cash during the next harvest. This practice must be stopped in order to make the seeds more popular among the farmers. The farmers also did not use some variety of seeds as they
come very late. It brings us to the conclusion that such variety must be popularised as do not take much time to ripen. As regards paddy, the general impact upon the farmers is that the improved variety required much water hence irrigation facilities are inevitable. It is appropriate to note that quite a negligible percentage of farmers felt that improved seeds were not available in sufficient quantity. The above description shows that high yielding varieties have not become very popular. Only educated and progressive farmers have taken to its use.

Block-wise figures reveal that Katni block is ahead of other blocks in using improved seeds because as much as 90 per cent farmers used the same. As regards the area under improved seeds the comparative figures show that it has increased quite appreciably in two blocks while it has reduced in the third one and only 16.2 per cent of the total cultivated area is under improved seeds which can not be termed as having favourable impact.

Chemical Fertilisers:

The enquiry revealed that only 46% of the farmers used the chemical fertilisers and they too, did not use the same constantly. Only 50 per cent of these cultivators had a distinctly a favourable attitude and admitted that chemical fertilisers have increased their per acre yield and they expected gains in yields through the use of the same sufficient to compensate for the additional expenditure. The expectations were affected by the environmental factor, the uncertainties of rains and the fear that the use of chemical fertilisers depleted soil fertility.
It has also been realised that lack of knowledge of using the fertilisers stand in the way of farmers. The incorrect procedure has given adverse results, therefore, the farmers did not form favourable attitude towards using it rather they think it is forced upon them. Then comes the question of irrigation facilities as fertilisers give better results in irrigated land but such facilities do not exist in the rural areas hence the limited use of fertilisers. Though now-a-days usefulness of chemical fertilisers has been proved even in the dry land, it has not yet been practised in the area to any great extent. But in Banda block there was marked increased in use of chemical fertilisers even in dry land. Compared to 1962 it increased 15 times in the year 1966. The figures indicate that even today the cultivators depend upon the farm yard manuring. Not much impact is visible of the propagation of chemical fertilisers but there is every evidence to show that the area under chemical fertilisers has increased after the inception of the programme.

As regards green manuring it is not much popular among the farmers as the survey revealed that only 15 per cent cultivators made use of it. In their view it is a great risk to practise green manuring as in the absence of favourable weather it turns into some weeds in stead of green manuring. In the survey it has been recorded that the acreage under green manure has reduced considerably in three blocks and in other blocks no impact could be measured as figures of the beginning years could not be available. Compost schemes have become extremely important particularly in view of the shortage of chemical fertilisers. Here also, not much
has been done apart from simply following the age old methods and practices. As regards compost in the area, 55 per cent cultivators had no knowledge about it and even those who knew about it, did not adopt the correct procedure to prepare the same. Only 10 per cent had compost pits. It shows quite poor impact of the usefulness of compost in agriculture. Even today they use cow dung as fuel.

In order to ensure that large areas under cultivation are adequately manured it is essential to develop local manurial resources to the maximum possible extent as they are within the means of the cultivators. The availability of credit for enabling small cultivators to use fertilisers is also of the greatest importance. As regards the efficient distribution of fertilisers and use of increased supplies the Third Five Year Plan states, "In this connection, reference may be made to the recommendations made by the Fertiliser Distribution Enquiry Committee, particularly, to the emphasis on the use of fertilisers in the form of mixtures with a view to promoting balanced fertilisation and making the best use of supplies of nitrogenous fertilisers, improved arrangements for distribution and attention to quality, and reduction in costs of distribution."

In the rural areas night soil and urine are to be utilised by devising suitable latrines and provision of urinals for family as well as public use. For popularising green manure necessary facilities and inducements are to be given to cultivators by supply of seeds and irrigation at the time of sowing and by offering concessions. This fact must be borne in the mind that as the

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fertilisers are costly, their use for growing food crops can only be made if prices are reduced. In addition to this, it would be far better, if the fertilisers are made available to the farmers on the subsidy basis. But it has not yet taken place in the area under study. It has been given only on loan basis as the State Third Plan states, "no subsidy will be permissible and the fertilisers will be distributed on short term loan basis, recoverable in one instalment after harvest on the crop for which it was distributed but a grant of Rs. 5 per ton will be paid to the Madhya Pradesh Co-operative Marketing society for handling and making arrangements for distribution of fertilisers."1

Irrigation:

In the sphere of irrigation there has been 177 per cent increase in the same in the year 1966 compared to pre-inception figures which is not evenly spread in all the blocks though in all the blocks irrigated area has risen, the rise being highest i.e. more than nine times in Sehora block under Jabalpur district. As regards rise in irrigated area compared to cultivated area the pre-block figures vary from 0.25% to 3.2% while the figures of 1966 are 0.32% to 13.9%. With the increase in the irrigated area the cultivated area has also increased. The irrigation facilities were lacking in the villages surveyed. Only in seven villages these facilities existed and irrigated land varying from 26 acres to 446 acres, being highest in the villages of Katni block. The villagers greatly felt the shortage of irrigation facilities. The over-all progress of irrigation is very slow. It has also been
evident that for irrigation local resources have not been properly developed and utilised. As in some villages under study and in other areas of the blocks water has not been lifted for irrigation purposes from the sites on the banks of rivers and tanks. In the same way flow irrigation has not been developed by undertaking construction works like dams across a perennial nala etc. which could have provided irrigation at cheap cost and increased per acre out-turn. In some cases the persian wheel or Rabat has also not been economically used for irrigating additional area. It is quite necessary that local resources of irrigation must be used to the full extent.

The development of minor irrigation facilities needs more emphasis in the rural areas. Viewing their advantages that they can be executed quickly, entail small outlays and there is only a short lag between their completion and the realisation of benefits. Moreover, they can be undertaken at the initiative of individuals and small groups and offer scope for participation by the community. It is of the utmost importance that for the greater part minor irrigation should be developed as essentially a community programme. It becomes all the more evident in the light of the fact that in Madhya Pradesh only 5.3% of the total cultivated area comes under irrigation which is quite small. There is a large scope in the State as well as in the blocks under study for increasing irrigation facilities by sinking of wells by cultivators in suitable areas. It entails the need for financial assistance both for the construction of new well as also for the repairs of existing wells. In the area under study not much progress has been made in this
direction hence poor impact. Incentive must be given to the farmers
to install diesel pumping sets where electric power is not available,
for securing more water for irrigation economically. The village
panchayats and co-operative societies must be forced to take initia-
tive in developing the irrigation facilities in the villages.

For obtaining a favourable impact of irrigation
facilities, "it is necessary that financial provisions for minor
irrigation schemes, whether under agriculture or community develop-
ment are pooled together at the block level and utilised for the
maximum benefit of the area. It is considered that for individuals
assistance for minor irrigation works should come, as far as
possible, from co-operative agencies and taccavi loans and from the
agricultural departments. Provision available under the community
development block budget should give preference to schemes benefitt-
ing large number of persons jointly."1

Soil Conservation:

Soil conservation does not seem to be a serious
problem in the area though measures have been taken in all the blocks
and on an average there was increase of 1940 acres of area bunded
or terraced in the year from 1961-62 to 1965-66. As regards land
reclamation, during the period of five years an average area of
2322 acres per block has been reclaimed and 46.2% area to the
cultivable waste has been reclaimed since 1961. During the period
the reclamation has brought about an average addition of 3.6% in
the cultivation. No record was available of the land put to the
agricultural use thus reclaimed hence no definite impact could be

1. Third Five Year Plan, op. cit. p. 309
measured.

Demonstrations:

In the survey demonstrations have been found totally absent as only 30 per cent of the farmers admitted to have seen the same. The demonstrations have not been organised according to the plans and reports of the blocks hence the awareness and interest of the farmers could not be created towards improved practices of farming. It is quite necessary in this direction to set up demonstration farms on cultivator's fields as it is very important to demonstrate the benefits accruing from improved agricultural practices to the cultivators to convince them and induce them to adopt such practices. In the State Third Five Year plan there was provision of selecting 2 acres plot in cultivator's fields for conducting demonstrations through out the year. The cultivators in whose fields the demonstrations were to be held, were eligible to a subsidy of Rs. 50 for each 2 acre plot. But the survey reveals that such demonstration farms have not been set up in the area and moreover, the farmers have also not shown interest for giving there plots for setting up of such farms hence demonstrations have not been successfully organised.

Improved Methods and Implements:

As regards the improved implements and other methods used in agriculture the survey reveals that there exists good knowledge of these methods and implements like iron-plough, seed-drills, winnowing fans are quite popular. Instances have also
been found that some V.L.Ws. have prepared their own seed drills having quite efficient working capacity. In some cases the use of iron ploughs was limited in the absence of good cattle. It is quite praise-worthy that the farmers have started reaping the benefits of the improved implements and methods brought into use to modernise the agriculture. It is quite imperative that lack of financial resources must be removed to enable the farmers to purchase such improved implements. Next, the cultivators have to be convinced about the superiority of the improved practices over their traditional methods. The ratio between these categories would obviously determine the extent we can expect to achieve our goal of self-sufficiency in food. Nevertheless, it is worth appreciating to note that in the surveyed area some sections of farmers are very progressive and venturesome and are prepared to make the full use of technology and other resources within their reach. No much impact has been noticed in the way of popularising the Japanese method of paddy cultivation though most of the farmers are well aware of this method. The reason of its non-adoption was reported to be lack of irrigation facilities and its costly nature. The average figures of Japanese method of paddy cultivation being 308 acres only from 1961 to 1966 does not reveal any significant ratio of area put to it. The fact that most of the farmers have given up its use after adopting the same for a period denotes that they are not yet convinced of its benefits. The handicaps in the way of its adoption must be removed.

Relating to the use of insecticides and pesticides by the farmers they have not taken to its use appreciably as only 30 per cent cultivators used it for plant protection which
shows that the extent of its adoption is very small.

Plant protection measures are very necessary as much damage to crops by pests and diseases as also during storage accounts for the loss of a substantial percentage of the total produce. In the Third Five Year Plan of Madhya Pradesh it was proposed to set up 32 new plant protection units in addition to the 11 already set up in Second Plan in order to have one unit in each district. Besides, three mobile units equipped with power equipment and pesticides for being rushed to areas affected by pests and diseases in an epidemic form were also proposed to be set up.

It has also been indicated in the survey that farmers are not very often required to use plant protection measures. But this fact must not wake them from the plant diseases as whenever there have been plant diseases and insects, severe loss has been caused to the crops. Hence all the measures must be readily adopted for preventing damage to crops. It is, however, to be seen that they are used in such a manner that they have no harmful effect upon the consumers—human beings and cattle of the plant to which it is applied. There was a provision in the Third Plan of State Government to make the financial aid available to the farmers through service co-operatives or panchayats in the form of loan and subsidy for purchase of plant protection equipment and chemicals. But in the area under study it was not introduced in the survey. But it is a desirable step and must be adopted as soon as possible.

Co-operative Farming:-

As regards co-operative farming its knowledge is very limited among the farmers as only 15% knew about it but they,
too, did not practise it. The general attitude of the farmers is that they do not want to pool their land which affords an opportunity to the co-operative to create a land base for efficient and economic operations and contributes one of the important measures of assistance to the weaker sections. It can be easily concluded that our experience with co-operative farming in the area is thus disheartening. It is quite imperative that it should be developed in the rural area to secure the development of the village economy as a whole on the lines visualised in the Five Year Plans. Owners of small holdings should be specially assisted to come into co-operative farming societies. The organisation of service co-operatives in the villages to pave the way for co-operative joint farming is a desirable step.

Impact of the Measures Relating to Animal Husbandry:

Animal husbandry and agriculture are complementary to each other and should progress side by side in order to balance the country's rural economy. Keeping this point in view it becomes quite essential to measure the impact of animal husbandry on the rural peasants. In the blocks three measures namely upgrading the breed of animals, supply of food and fodder development and disease control through veterinary aid facilities have been adopted under this programme.

The data in this field were collected for five years duration from 1961-62 to 1965-66. During this period the average number of bulls in each block comes to 12 only which is quite insufficient. But more important than the number of bulls is the proper care of them to increase their servicing capacity but it is
lacking in the rural areas. In most of the villages it has been noted that it is the most unheeded animal without any master and is generally put to the use other than breeding. It is quite undesirable. The people also reported of the late supply of bulls. In general there has been improvement in the breeds of bulls. But it is much below the target.

In the field of artificial insemination only 9 centres were existing in the blocks and three were defunct. In three centres which were quite old there was appreciable progress. But as regards the village people, 30% did not know the meaning of it which shows poor propaganda of activity. The people have not taken much advantage of this scheme and naturally it shows the poor impact of the programme. The record of progeny was available only in two centres and the percentage was very low. It must increase in order to convince the success for A.I. to the villagers. It can be concluded that it is a sign of success that the popularity of this programme is on the increase.

The figures relating to the castration of the bulls can not be relied upon as there appears wide difference between the actual work done and the figures appearing in the block reports. During the period of five year on an average 5015 bulls were castrated in every block. The poor response from the villagers shows that they do not have much confidence in the block method of castration. People still depend upon their local methods of castration. It is quite essential that there must be uniformity in the method of it and villagers must be convinced about the superiority of the block method. The V.D.Ws. must be prepared to conduct the
castration of the bulls in the villages when needed by the people. That the villagers have started taking interest in the block method and are willing to take it shows the fairly good impact of it.

In the field of fodder development new crops of the fodder have not yet been introduced in the villages. Only in few villages the cultivation of Berseem grass has been taken up and only on an average 50 acres of land has been brought under it which is quite insufficient viewing the quantity needed to feed the animals. In some blocks shortage of fodder was realised and in general all the villagers were experiencing difficulties in procuring fodder particularly in summer. This fact was due to shortage of rains and farmers were required to purchase the fodder on a very high price. Naturally it resulted in the poor feeding and weak cattle which could not conduct the agricultural operations efficiently. It is necessary that the farmers must be initiated to grow the improved variety of fodder in sufficient quantity and simultaneously the quantity of cotton seeds and oil cakes must be increased to feed the milking animals as the milk yield is quite poor. It will be better if the same are available to the villagers on cheaper rates.

Though the silage pits, improved mangers and water troughs have also been introduced in the villages under the activities of animal husbandry, their popularity is quite poor and no strong measures have been taken by the block authority to start the same with the result that today the village people show their apathy towards them. The survey reveals that these activities were introduced in the first stage of the block and were given up after
that stage. The block reports revealed that statistics regarding the number of silage pits, improved mangers and water troughs in the villages surveyed were very high but they were conspicuously absent in the villages.

In the field of disease control it was noticed in the survey that there was no variation in the diseases prevailing among the animals. Veterinary hospital was found in all the blocks and inoculations and vaccinations are conducted by the block personnel. The out-lying dispensaries and first aid centres also treated the animals and undertook inoculation and vaccination. Though there has been visible improvement in the quality of livestock in the villages, the people have not taken full benefits of the measures. The people depend much upon the local medicines to treat their cattle and in many cases the same have been found effective. The villagers are least interested in taking their animals to the hospitals. Measures must be adopted to make them available all the benefits of these hospitals and the diseased animals must be attended in the villages to popularise the hospital treatment. The villagers also reported about the carelessness of the concerned authorities towards them in case of their animal diseases and treatment. This must be removed.

Suggestions for the Improvement in the Field of Animal Husbandry:

The survey has revealed that there is much scope for the development in the field of animal husbandry in the region. The first necessity in this direction is better feeding. It requires fodder development in the large area. The farmers must
grow improved grass so that better nutritive value is available to the cattle. Extension officers have to take such measures that are helpful for the farmers to cultivate the improved grass. In M.P. the fodder availability per bullock in the wheat tracts under which the region under study comes is 7.53 lbs roughage while the daily requirement is 12 lbs. There is great need to popularise the use of silage and such concentrates as oil-cakes, husk and inferior grains.

Apart from feeding, better breeding also needs great attention. This involves the castration of inferior animals, the introduction of improved breeding and the evolution of breeds suited to local conditions. In M.P., the best cattle - bigger, better fed and capable of more work - are the Malwi breed in the Malwa plateau and the Nimar in the south western districts. Bulls should be exchanged between these areas. Research should be started to evolve breeds suited to local conditions. In the State Intensive Animal Husbandry Department for development have been started at Bhind and Bhopal and Research Institutes of disease control have also been started at Gwalior, Bhopal, Rawa and Raipur. All efforts must be made to import the improved breeds from these regions of the State in the region under study in order to improve the existing breeds. It must also be recognised that the maintenance of good breeding bulls will be of little use unless senile and inferior bulls are castrated and useless animals are eliminated. There may be resistance to such measures but unless excess and useless cattle are eliminated they will nullify much of the effort to increase production.
Impact of Community Development Programme
on the Rural Economy of
NORTHERN MAHAKOSHAL (M. P.)

In the other forms of animal husbandry in the area under study, poultry farming is most important. In some blocks there has been good progress in this field. It shows good impact that in some villages of the above blocks the people now passionately believe that poultry farming can easily provide for the much needed second string to the economic bow of the poor peasants who sit idle for quite some months in the year. The villagers showed good response for the development of poultry. To popularise it, all kinds of measures such as distribution of hatching eggs and subsidy to purchase the improved birds have been taken up. But there is dark side also. In many villages the programme of poultry development has been stopped. Caste factor and vegetarian nature of dietary habits of the people have inhibited the development of poultry. The heavy casualty among the birds has to be checked. For the proper development of poultry, it is suggested that cheap poultry feeds and animal proteins must be made available in the region. If proper marketing facilities are made available and the producer is assured of a regular off-take at reasonable prices, then a large number of farmers can take to poultry keeping on a commercial or semi-commercial scale even without any financial assistance from the government. The organisation of co-operative marketing societies to handle poultry produce as well as to arrange the supply of cheap feeds is an-essential pre-requisite for development of this industry.

As regards fishery, its scope is very limited in the area surveyed as it has been introduced only in five villages and the people have been provided with all the material required for it.
It needs tanks in the villages with all the material required for the development of fishery. Though the block reports reveal that huge supply of fingerlings in the villages has taken place, there was no trace of fishery development in the villages. This brings us to the conclusion that the villagers have not taken benefits of this activity as they lack interest in it. Therefore, it can be said that general achievement is not satisfactory in this field. In the same way no progress has occurred in the field of piggery development.

As regards dairy development, no well-organised government dairy exists in the area under study. Only private dairy on a very small scale were found in the area. With the prevailing condition of shortage of milk even in the villages the point of establishing government dairies in the villages needs rethinking and considerations.

The general conclusion may be drawn that applied nutrition programme of the government and the schemes for the development of poultry, fishery, dairying and horticulture etc. have not made much impact on the rural people.

**Impact of the Programme on the Paper:**

The detailed survey of the area and an enquiry from the villagers and block officials together with close observation of the reports and different aspects of the programme bring some important facts of the community development programme.

The general appraisal of the working of the programme in the area would indicate that it has proved to be a
valuable aid to general economic and social development particularly by the provision of the needed infrastructure for the development. The huge data bear out that there is now a wide spread awareness among the farmers of the importance of the better seeds, fertilisers, pesticides and other improved agricultural practices and the same are intensively used by the farmers. But the instances are not wanting to show that cultivators in the immediate vicinity of the block office are still ignorant of these much talked schemes. Statistics compiled by the block offices reveal the great achievement in all the fields of the programme but the reality is something else. The schemes are run and are implemented on the paper only, for instance, the improved seeds promised do not very often reach the cultivators in time or sometimes the fertilisers stock proves inadequate or infructuous and sometimes it is not used at all resulting in the waste. On the other hands seeds and fertilisers issued free of charge for the purpose of demonstration find their way to other forms of use and not for productive purposes as in the survey it has been noticed that demonstrations are hardly organised by V.L.Ws. Really it is quite strange to note that even the block official and personnel in charge of reports and statistics are not confident of their being true. They put the entire responsibility to the V.L.Ws. for collecting such information. No uniformity was noticed in the collection of information. No wonder that there is wide gap between reality and the picture presented by statistics. The block staff is only concerned with the various items mentioned in the proforma of monthly and quarterly progress reports of the block. It is only on the basis of these reports that the progress of the
block as a whole and the work of the individual extension worker is judged. This makes the extension staff to worry only for fulfilling their targets and to show that there is visible achievement on the paper. It is not the fact that they are not aware of the plight of the villages but still they are writing notes about it.

Thus there is a wide gulf between the achievements recorded in the block progress report and the actual achievements in the field. Many items are mentioned in the block report but hardly a few may be worth the name in the area. Community development programme in the field is quite different from what is mentioned in the reports. Keeping it in view it becomes quite essential that the criteria of progress on the basis of progress reports decorated with high figures must be shifted to the quality of actual performance.

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