



GOVERNMENT OF KARNATAKA

UTILISATION PATTERN
OF
RESERVATION FACILITY IN B.Sc. AGRICULTURE
FOR AGRICULTURISTS OR THEIR CHILDREN

*

MANPOWER AND EMPLOYMENT DIVISION
PLANNING DEPARTMENT
BANGALORE
1983

GOVERNMENT OF KARNATAKA.

UTILISATION PATTERN OF RESERVATION FACILITY IN B.Sc.AGRICULTURE
FOR AGRICULTURISTS OR THEIR CHILDREN.

MANPOWER AND EMPLOYMENT DIVISION,
PLANNING DEPARTMENT,
BANGALORE.

1983

STUDY ON UTILISATION PATTERN OF RESERVATION FACILITIES IN
B. Sc., Agri. FOR AGRICULTURISTS OR THEIR CHILDREN

1. Introduction:-

A better utilisation ^{of} facilities available for gaining knowledge and using of the knowledge so gained in increasing production in the economy as well as provision of availing services in the economy is a crucial one. A proper utilisation of the facility given leads to improvement of the performance of the economy in the particular sector.

Provision of education is a crucial input in building up a good base for economic development in agriculture. Knowledge of improved methods of agriculture application of the new techniques of cultivation go a long way in increasing the agricultural production. In the distribution of the access to facilities to gain knowledge, certain segments of the society do not get their adequate share. This is so far persons who hail from the rural areas.

Taking note of the situation, Government of Karnataka in 1975 made a provision for 15 per cent reservation for admission to the course in the University of Agricultural Sciences for Agriculturists and their children by an ordinance. For the purpose of the provision of the reservation facility ^{to} Agriculturists means person who, is owner or tenant holds lands and whose main source of income is from personal cultivation of the land and includes any person whose principal means of livelihood is from manual labour on agricultural lands. For purposes of admission under this reservation, certain tests were prescribed namely:-

- a) Ploughing over a short length and b) yoking of bullocks
- c) identification of Agricultural implements
- d) identification of Agricultural grains
- e) identification of agricultural fertilisers
- f) identification of agricultural fruits
- g) identification of agricultural crops
- h) identification of agricultural veterinary/fishing equipments
- i) how to approach a cattle or cow for milking,
- j) how to hold a lamb/sheep etc.

These tests are to be conducted by a committee constituted for this purpose.

In a recent review to consider ways and means for a better utilisation of scientific and technical personnel for Karnataka it was stated that many of the B.Sc., (A r) Graduates who secure seats in agricultural university utilising the reservation made for sons of farmers seek jobs in the organised sector particularly in urban based employment areas. In view of this it was decided that manpower and employment division of the Planning Department should carry out a study to ascertain how this reservation facility has been utilised by the sons of farmers.

2. Objectives:-

Consequently a survey was undertaken to ascertain (i) the extent to which the reservation facility has been used (ii) the pattern of utilisation of knowledge and degree gained for cultivation of land or for extension and other allied work in the agriculture or in other allied spheres and (iii) problems faced by those who are trained under the reservation facility.

Coverage:-

Students who secured seats under the reservation quota in the agricultural college at Dharwad and Bangalore from the year 1975-76 to 1977-78 academic years were covered. The list of beneficiaries and their address at the time of admission were obtained from the University of Agricultural Sciences, for 1975-76 and 1977-78, the addresses from the Agricultural College, Dharwad were not received.

Reasons:-

A simple questionnaire was designed and were sent to 48 beneficiaries. Of this 72 filled-in-schedules were received. 2 of them were rejected. Copy of the questionnaire circulated is given/at Annexure- A

2. Findings:-

1) Occupational pattern of the beneficiaries:-

Occupational pattern of beneficiaries under the

reservation scheme shows that 12 of them were fully engaged in Agriculture, 12 partly engaged in Agriculture, 19 were pursuing higher studies, 13 were unemployed and 2 had not completed the course but engaged in Agriculture at the time of survey. The details are given in table (1).

Table-1

Number of beneficiaries classified according to present status.

Present status	Number of beneficiaries
1. Fully engaged in Agriculture	12
2. Partly engaged in Agriculture	12
3. Employed in different organisations in Agricultural Sector.	11
4. Employed in different organisations in non-agril. sectors.	1
5. Pursuing higher studies	19
6. Unemployed	13
7. Not yet completed the course but engaged in agriculture.	2
Total:-	70

Of this 12 were engaged fully in agriculture ever since their completion of the course. 6 beneficiaries were of the view that the knowledge gained in B.Sc., Agril. helped to increase the income derived from agriculture. 9 beneficiaries were of the view that the income obtained by them is less than what they would have got if they are under salaried employment. 9 of the beneficiaries were engaged in agricultural activity in their leisure time during their studies.

Out of the 13 beneficiaries who were partly engaged in agriculture 5 had no gainful activity, two of them were guiding the farmers, 4 were searching for jobs, and two had not stated their gainful activity, of them beneficiaries who were partly engaged in agriculture felt that their being engaged partly in agriculture was mainly because of under unemployment. One was searching for job. 4 of them had not given any reason for being partly engaged in agriculture. Out of 13 unemployed beneficiaries of the reservation two were willing to go back to agriculture.

12(17.14%) of the beneficiaries were fully engaged in agriculture. Two of them were interested in taking alternative employment. One of them felt that the yield from his land is uneconomical. Another beneficiary felt that the income derived from agriculture is to be shared by other members of his family.

(ii) Analysis of distribution of beneficiaries fully engaged in agriculture according to income.

75 per cent of the beneficiaries had an income less than Rs.10,000/- only one out of 12 beneficiaries had an income over Rs.25,000/- Details are given in Table-2.

Table-2

Beneficiaries fully engaged in agriculture classified according to income.

Sl.No.	Annual Income	No. of beneficiary	Percentage to total
1.	Upto Rs.3,000/-	3	25.00
2.	3000 to 5000	3	25.00
3.	5000 to 10,000	3	25.00
4.	10,000 to 15,000	1	8.33
5.	15,000 to 25,000	1	8.33
6.	Above Rs.25,000	1	8.34
Total:-		12	100.00

iii) Employment pattern of employed beneficiaries:-

2 beneficiaries with a land holding of 2.5 to 5 acres who were employed had not taken up agriculture because they considered that they would be underemployed. The family size of the beneficiaries were 6 and 8. In one case two members other than beneficiaries were engaged. One beneficiary who was employed had land between 5 to 10 acres did not take up the agriculture because of a labour problems. 9 beneficiaries who were employed with a land holding of above 10 acres were not fully engaged in agriculture because their land was dry land, irrigation facilities were lacking and financial problems. Details are given in Table-3.

Table-3

Distribution of beneficiaries employed by reasons for not taking up agriculture and by land holding size.
(After completion of the course)

Sl.No.	Land holding (in acres)	Total	Employed
(1)	(2)	(3)	(4)
1.	0-1	00	00
2.	1-25	5	00
3.	2.5-5	14	2
4.	5-10	13	1
5.	above 10	37	9
6.	Not specified	00	00
Total:-		69	12

7 beneficiaries were employed in Administrative or Executive type of jobs, 4 in the area of scientific research and extension services and one was employed in teaching job. 8 beneficiaries were employed in Govt./private sector. Details are given in Table-4.

Table-4

Distribution of beneficiaries employed (either on salary or on wages) by employed type and occupation classification.

Sl. No.	Employed Type	Occupational classification					Total
		Admin-istrative and executive	Scient-ific and research extension	Cleri-cal	Teach-ing	not specified	
1	2	3	4	5	6	7	8
1.	University of Agricultural Science College	...	2	...	1	00	3
2.	Karnataka State Seeds Corporation	3	00	00	00	00	3
3.	Banking	2	00	00	00	00	2
4.	Private	2	2	00	00	00	4

8 of the beneficiaries employed at the time of the survey were engaged partly in agriculture and guiding for better yields during the waiting period. 3 of them were trying for a job only.

~~beneficiary obtained a job immediately after getting the degree.~~

Details are given in table-5.

Table-5

Distribution of beneficiaries employed by nature of activity during the waiting period for securing employment.

Sl.No.	Nature of activity	Number
(1)	(2)	(3)
a.	Engaged partly in agriculture and guiding for the better yields	8
b.	Immediately got the job	1
c.	Trying for jobs only	3
Total:-		12

iv) Analysis of distribution of employed beneficiaries by type of organisation in which employed field of employment and monthly emoluments.

10 beneficiaries at the time of survey earning a salary of Rs.501 to Rs.1000/- Of this 3 beneficiaries each were working in agriculture in state Government/local body and Govt.undertakings Central/State respectively. Two beneficiaries each were in private sector in agriculture and non-agricultural areas. One beneficiary was drawing a salary of more than Rs.1000/- and was working in a bank. Details are given in table-6.

Table-6

Distribution of employed beneficiaries by type of organisation in which employed, field of employment and monthly emoluments:-

Sl. No.	Type of Organisation employed.	Field of employment	monthly emoluments range				Total
			500-1000	501-1000	1001-2000	Above 2000	
	2	3	4	5	6	7	8
1.	Central Government	a) Agriculture	..	..	..	..	..
		b) non-agriculture.	..	..	..	..	..
		Total:-	..	..	..	..	..
2.	State Government/local bodies	a) Agriculture	..	3	..	..	3
		b) non-agriculture	..	..	..	..	..
		Total:-	..	3	..	..	3

1	2	3	4	5	6	7	8
3. Bank	a) Agriculture	1	..	1	..	2	
	b) Non-agriculture	..	..	..	..	..
	Total:-	1.	..	1	..	2	
4. Government undertakings Central/State	a) Agriculture	..	3	..	..	3	
	b) non-agriculture	..	..	..	..	..
	Total:-	..	3	..	..	3	
5. Private	a) Agriculture	..	2	..	..	2	
	b) non-agriculture	..	2	..	..	2	
	Total:-	..	4	..	..	4	
6. Not specified	a) Agriculture	..	..	..	..	..
	b) non-agriculture	..	..	..	..	..
	Total:-	..	..	..	..	..
Total:-	a) Agriculture	1	8	1	..	10	
	b) non-agriculture	..	2	..	..	2	
	Total:-	1	10	1	..	12	

v) Pattern of unemployed beneficiaries:-

7 beneficiaries were unemployed upto one year despite efforts made to secure employment by Bank examination, I. T. S. examination, Private firms/Co-operative Sugar Factory, Deptt. of Agriculture. Most of these are urban based employment. 4 of them were unemployed for 1 to 2 years. 2 of them were unemployed for two to 3 years.

vi) Analysis of beneficiaries by size of land holdings and number of other members of household depending on land:-

At the time of selection to the course all the families of the beneficiaries had land. However, at the time of present survey one family reported that they did not have any land. Distribution of beneficiaries by land holdings at the time of selection to the course

and at the time of survey is given in table-7.

Table-7

Size of holdings by family size.

Sl. No.	size of holding (in acres)	Number of families holding land	
		at the time of selection	at the time of survey
1.	upto 1.00		
2.	1.01 to 2.50	5(7.14)	5(7.25)
3.	2.51 to 5.00	14(20.00)	14(20.29)
4.	5.01 to 10.00	17(24.29)	13(18.84)
5.	10.01 and above	34(48.57)	37(53.62)
Total:-		70(100.00)	69(100.00)

(Figures in brackets indicate percentage to total)

Families of the beneficiaries who had land above 10.01 acres at the time of selection was 34(49% of the total families) and this registered an increase to 54 per centage at the time of survey. 5 beneficiaries (7 per cent) had land less than 2.5 acres 31(44 per cent) had land between 2.51 acres to 10 acres at the time of selection which declined to 27(39 per cent) at the time of the survey. A family of one beneficiary had sold the land by the time the beneficiary completed the course.

66 beneficiaries (94.02%) had dry land at the time of selection where as 62 beneficiaries(89.86%) had dry land after completion of the course. The dry land holding by the beneficiaries has registered a decline. 39 beneficiaries (55.21% of the total) were having land. It is irrigated by other sources like tanks and wells at the time of selection where as 42 beneficiaries(60.87%) had irrigated land with tanks and other sources of irrigation. More families have taken up irrigation of their lands by tanks or wells after completion of the course by the beneficiaries. The number of families whose holdings were irrigated by canals has remained unchanged. 23 families of beneficiaries were having land under

garden/plantation. Holdingwise distribution of families by type of land held at the time of the selection to the course and at the time of survey is given in Annexure-1.

To utilise the knowledge gained in the course on land it is not only necessary for the beneficiary to hold land but also the number of family members of the household who are depending upon the land for their livelihood be within a reasonable limit. In families of 8 beneficiaries family size are 3 to 5 and 1 to 3 persons other than the beneficiary were engaged in agriculture. Among 43 beneficiaries families the size of the household was 6 to 9. Of this in 4 families 2 persons other than the beneficiaries were depending upon agriculture, in 21 beneficiaries families 2 to 3 persons other than the beneficiaries engaged in agriculture and in 15 families 4 to 7 members other than the beneficiary were engaged in agriculture. In 3 beneficiaries families above 7 persons other than the beneficiary were engaged in agriculture. In 18 beneficiary families the household size was 10 and above. In 5 families 2 to 3 persons other than the beneficiary were engaged in agriculture and in 8 beneficiaries families 4 to 7 persons other than the beneficiary were engaged in agriculture. In 4 beneficiaries families above 7 persons other than the beneficiary were engaged in agriculture. More number of families other than the beneficiaries are dependent upon agriculture for their livelihood. Details are given in table-8.

Table-8

Families classified according to number of other household members engaged in agriculture by house-hold size.

Household members other than the beneficiary participating in agriculture						
House hold size	Nil	1	2-3	4-7	above 7	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 3 members
4 to 5 members	..	2	6	..	..	8
6 to 9 members	..	4	21	15	3	43
10 and above	..	1	5	8	4	18
Total:-	..	7	32	23	7	69

Families classified according to number of other household members engaged in agriculture by house-hold size.

Summary of the findings:-

An analysis of the utilisation of reservation for Agricultural Graduates in B.Sc. Ag. reveals that hardly 34 per cent of the beneficiaries had taken to their own cultivation fully or partly in agriculture. Even among those who are fully engaged in agriculture nearly 50 per cent were interested in switching over to urban based employment. The beneficiaries who were unemployed were also interested in searching for gainful employment in urban based organisation. Even among beneficiaries who are pursuing higher education it is doubtful as to whether many of them would go for own cultivation or fully engaged themselves in Agriculture. A major contributory factor for this situation is that about 80 persons of the beneficiaries who were engaged fully in agriculture had an income less than Rs. 5,000/- Apart from the income the other contributory factor for seeking urban based jobs seems to be the mental attitude of the beneficiaries to prefer a salaried urban based job as it provides security. Some of the beneficiaries have also stated that they would have earned more had they been employed.

Upto 3 members
 4 to 5 members .. 2 6
 6 to 9 members .. 4 21 15 3 43
 10 and above .. 1 5 8 4 18

Upto 3 members
 4 to 5 members .. 2 6
 6 to 9 members .. 4 21 15 3 43
 10 and above .. 1 5 8 4 18

taken up salaried employment and only a few of them have admitted that the knowledge gained by them has helped them to increase their income by engaging themselves in Agriculture.

3. Recommendations:-

The objective of providing for reservation facility for agriculturists or sons of the agriculturists for reservation of seats in B.Sc., Ag., course is to see that the recent innovations in the area of research and extension in agriculture to increase the yield would be made use of to increase agricultural production. Moreover the wage employment that can be generated for unemployed in Karnataka would hardly be on an average 10-12 per cent. Taking into account the magnitude of the unemployment among the educated and the need to provide for adequate means of income and livelihood it is necessary to see more and more people trained in the course particularly those who are admitted under the reservation facility go back to agriculture and use their knowledge so gained on their own land. To provide for a reasonable income for the beneficiary on the land it is necessary that certain subsidiary occupations in addition to agriculture being taken up needs to be encouraged. The possible areas of operation are establishment of Agro Services Centres, Dairying, Poultry, Establishment of Fair Price Shops wherever they are residing and agricultural clinics. This should be in addition to cultivation of their own land.

Establishment of Agro Service Centres in rural areas where there is need of providing for services for Agricultural machinery will not only help the farmers of the area to complete their agricultural operation in time but also help the agricultural graduates to earn their living. In all each Agro Services Centre generate employment to six persons apart from the agricultural graduate who would be in addition cultivating his own land. This would not only help him in providing the services to his own land but also to land of other farmers in his town and neighbouring

Fertiliser distribution centre combined with agro service centre would be quite useful. This is so because almost all the co-operative societies have their selling points in rural areas. Most of the fertiliser companies have also their selling agencies distributed all over the State. Agro-Industries Corporation have also their agro-kendras at taluk levels. Selling of fertilisers can be taken up as part of Agro service centres. The income that one can expect from Agro-service Centres, combined in this way would be Rs. 15,000/- to Rs. 16,000/- per year yielding a return of about 12 per cent over the investment.

However agricultural machinery like tractors and others are also owned by private individuals. This also requires regular servicing and repairing facilities at their nearest points. Agro-industries Corporation has also opened agro service centres for hiring out farm equipments and sales of agricultural inputs. In view of this there seems to be scope for starting up of workshop-cum-agro service centres, in combination with fertiliser distribution. In addition an agricultural graduate can profitably take to establishment of workshop for the manufacture of carts, assembling of bullock-carts and other related items of repairs which are of use to the farmers like repairs of sprayers, mould board plough cultivator, seed cum fertiliser drill, body ridger with marker, sprayers and tresters, spare parts, hydraulic trolley jack etc. Thus the scope of this area would be restricted to provision of package of services to the agricultural graduate who is cultivating his own land and also to others in the area. This can best be done by the agricultural graduate alone because of the specialised training given by the state to him at a very heavy expense to the State Exchequer. The land

required for maintenance of repairs and service is minimal. This type of centres can be opened in a cluster of 8 villages on the basis of number of tractors in the Cluster. This would not only accelerate the process of agricultural development but also maintain the agricultural graduate with adequate income as a proud entrepreneur and a number of other unskilled labourers which is again a process of employment creation with solid assets for the State's economy as a whole.

Similarly subsidiary occupations like dairying establishment of fair price shops and poultry development can be used to generate additional income. Intensive cultivation of crops, particularly high yielding and hybrid varieties necessitates appropriate plant protection measures due to constant cropping and the consequent build up of diseases. The farmers in rural areas generally depend up on the agricultural extension agency for advice in respect of plant protection measures and they purchase plant protection chemicals from the market. Invariably they do not get the required advice nor the service of the plant protection equipment and supply of chemicals in time as they will be available only in towns and cities. Agricultural graduates who are doing own cultivation could establish agricultural clinics where plant protection equipment could be hired out to the farmers. They could also advice the farmers on the plant protection measures that could be taken up and the chemicals to be used. These agricultural clinics may undertake repairs of plant protection equipment and supply pesticides and insecticides. An Agricultural clinic will have a capacity to cover an area of about 12 hectares per day of 8 working hours. This unit could be set up in a hired building consisting of two rooms of which one could be used as a store or godown. Income from each centre will be approximately Rs.14,878/- Each centre is likely to

provide employment for 24 persons excluding the agricultural graduate. The location of these clinics has to be determined based on the needs of the various areas in the State and the type of soil and diseases prevailing. It is therefore necessary for the Department of Agriculture and Agro Industries Corporation to assist the agricultural graduate who is willing to cultivate his own land in getting additional income.

As a long term measure it is also necessary to modify the provision of reservation for admission to take into account the size of the land with the agriculturists or the sons of the agriculturists held by the family at the time of admission before admission is given to the course. Provision has to be made to get a bond from the student admitted under the reservation provision giving an undertaking that he would go back to their own land without which they are not eligible for admission to the course and would not seek a salaried job. Unless these steps are taken immediately it would only mean that more number of agricultural graduates would be after salaried jobs which is limited in its availability. This creates more number of qualified people who are unemployed and are on the look out for urban based salaried job.

ANNEXURE-1

Distribution of beneficiaries by type of land and size of holders (at the time of selection)

Sl.No.	Type of land	01	1.01-2550	2551-5000	5001-10000	over 10000	N.S	Total
1	2	3	4	5	6	7	8	9
1.	Dry land	..	5	11	16	34	..	66 (94.02)
2.	Land irrigated by canals	..	1	5	2	5	..	13 (18.57)
3.	Land irrigated by other source like tankwells	..	2	7	9	21	..	39 (55.71)
4.	Land under garden/plantation	..	1	4	4	14	..	23 (32.86)

ANNEXURE -1(b)

Distribution of beneficiaries by type of land and size holdings (after completion of the course)

S1.No.	Type of the land	0-1	1-250	2.51-5.00	5.01-10.00	above 10.01	N.S.	Total
1	2	3	4	5	6	7	8	9
1.	Dry land	..	3	11	11	37	..	62 (89.86)
2.	Land irrigated by canals	..	1	4	2	6	..	13 (18.84)
3.	Land irrigated by other sources like tanks and wells	..	2	7	7	26	..	42 (60.87)
4.	Land under garden/ plantation	..	..	3	4	16	..	23 (33.33)

SURVEY TO ASSESS THE UTILISATION PATTERN OF RESERVATION
FACILITY IN B. Sc., AGRICULTURE FOR AGRICULTURISTS OR
THEIR CHILDREN.

QUESTIONNAIRE

1. Name.
2. Age in completed years as on 1-1-1982.
3. Present address
4. Qualification with subjects of specialisation if any.
5. Were you admitted into the B. Sc., (agri) course under the 15% reservation made for agriculturists or their children? Yes/No
6. What was the means of livelihood of you/your family at the time of your selection into the course? Cultivation/Agricultural Labour
7. If cultivation, was it as a owner or tenant?
8. Extent of agricultural land held by your family.

Type of Land	Agricultural land possessed (acres)	
	at the time of your selection	now
1	2	3

- i) Dry Land
- ii) Land Irrigated by canals
- iii) Land irrigated by other source like tanks and wells.
- iv) Land under garden or plantations
- v) Gross land possessed

9. Present Household size
- | |
|--------|
| Male |
| Female |
| Total |
10. How many members of your family are actively engaged in agriculture? (excluding yourself).

B L O C K - B.

PARTICULARS OF THE COURSE

1. Year of joining the B. Sc., (Agri) Course.
2. Year of Completion
3. Did you complete the course in the normal time prescribed? Yes/No
4. If no, to the above question, extra time, in years, taken for completion
5. Class secured by you in the course

Present Status:

What is your present occupational Status?

- Engaged fully in agriculture/
- Engaged partly in agriculture/
- Unemployed/self employed in non-agricultural field/employed.

B L O C K - C - I

If fully engaged in agriculture

- (i) Have you been engaged in that occupation ever since you completed the course? Yes/No
- (ii) What is the net annual average income derived from agriculture? Rs.
- (iii) Do you feel that but for the knowledge you have gained in B. Sc., agriculture course you would not have earned the income stated above? Yes/No
- (iv) Is the income earned by you less than the salary you would have got, had you opted for salaried employment? Yes/No
- (v) Were you engaged in agricultural activity in your leisure time during studies? Yes/No

C - II

- (i) If you only partly engaged in agriculture what is/are your other gainful activities?
- (ii) What is the reason for your being engaged in agriculture only partly?
- (iii) Do you still intend to go back to agriculture? Yes/No

C - III

If not engaged in agriculture either partly or fully but unemployed?

- (i) How long have you been unemployed?
- (ii) What efforts have you made to obtain employment?
- (iii) Did you attempt any self-employment venture?

C - IV If self employed in Non-Agriculture

- (i) What is the nature of the enterprise operated by you ?
- (ii) Address and location of the enterprise
- (iii) Net monthly income derived from the enterprise. Rs. Ps
- (iv) Reasons for resorting to self-employment
- (v) Would you still go back to the agricultural Profession? Yes/No

C - V

If employed (either on salary or on wages)

- a) Name of the employer/organisation in which employed.
- b) Address of the organisation
- c) Nature of duties performed
- d) Is the field of employment agriculture or non-agriculture?
- e) Monthly salary/emoluments
- f) What are the reasons for not taking up agriculture?
- g) What was your activity during the interval of completing the course till securing of employment?

Place:

Date :

Signature of the Respondent.