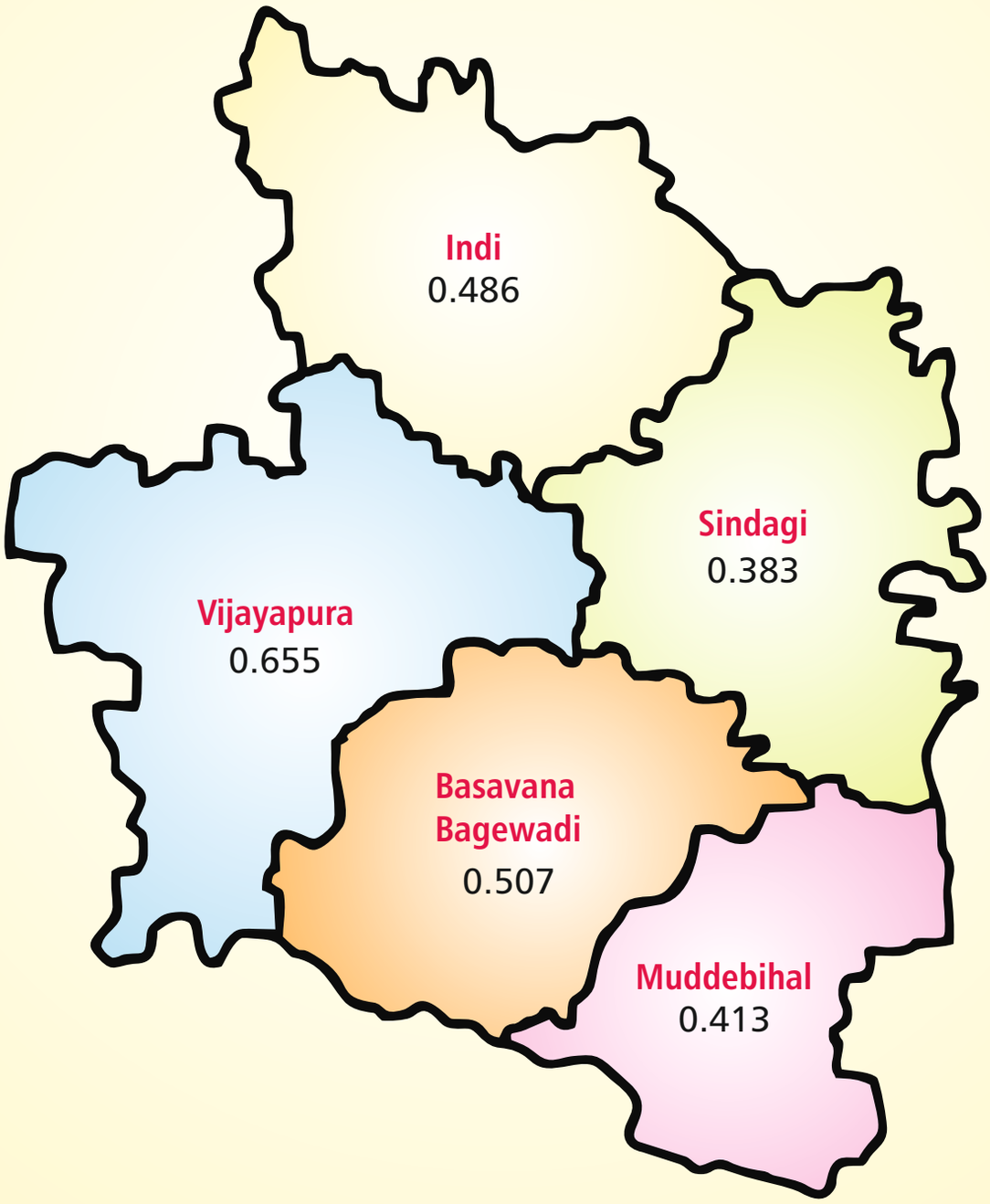
Chapter 6

INCOME, POVERTY AND EMPLOYMENT



FOOD SECURITY INDEX



Chapter Six

Income, Poverty and Employment

6.1. Introduction

Income, poverty and unemployment are all related terms. Income and poverty are inversely related, so also income and unemployment. This is a vicious circle and if not broken, it gets stronger and stronger. Poverty is normally explained as a "pronounced deprivation in well-being". Conventionally, poor are those who do not have enough income to provide a minimum living standard to themselves and their immediate dependents. A day in the life of poor is characterized by hunger, disease, squalor, suffering and subjugation of different types. Poor are the people whose voice is not heard, their existence is not respected and their labour is not appreciated. Poor people often lack key capabilities; they may have inadequate income or education, or be in poor health, or feel powerless, or lack political freedom.

In September 2000, the UN Millennium Declaration was adopted, where the heads of different countries committed to strong global efforts to reduce poverty, improve health and promote peace, human rights and environmental stability. The Millennium Development Goals that emerged from the Declaration are specific, including the one for reducing extreme poverty by half by 2015.

Human Development Report 1997 introduced the Human Poverty Index (HPI) in an attempt to bring together, in a composite index, the different features of deprivation in the quality of life to arrive at an aggregate judgment on the extent of poverty in a community. Human Development Report 2010 introduced the concept of Multidimensional Poverty Index to replace the HPI. The MPI is the product of the multidimensional poverty headcount (the share of people who are multidimensionally poor) and the average number of deprivations each multidimensionally poor household experiences (the intensity of their poverty). It has three dimensions mirroring the HDI- health, education and living standard, which are reflected in ten indicators.

In Karnataka, poverty is most visible in Raichur, Yadgir, Koppal and Vijayapura districts. An interplay of several factors cause rampant poverty. The economy of Vijayapura is mainly agricultural where, droughts and famines are common. There is a marked absence of manufacturing and commercial activities. Highly depressed rural economy often causes large-scale migration of people. Employment is mainly seasonal and wages are too low to provide a minimum living standard to rural masses. With this background an attempt is made to study the present status of income, poverty and unemployment in Vijayapura district.

6.2. District and Taluk Income

District gross domestic product (DGDP) is one of the means to look at the poverty and the backwardness of the



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The economy of Vijayapura is mainly agricultural where, droughts and famines are common. There is a marked absence of manufacturing and commercial activities. Highly depressed rural economy often causes large-scale migration of people. Employment is mainly seasonal and wages are too low to provide a minimum living standard to rural masses.

Table-6.1: Vijayapura District GDP 2005-10 (at Current Prices)

S.No	Year	GDDP (Rs. Lakh)	Per Capita GDDP (Rs.000)
1.	2005-06	3,35,047	17,502
2.	2006-07	4,41,091	22,775
3.	2007-08	5,96,336	30,445
4.	2008-09	6,41,770	32,405
5.	2009-10	6,47,041	32,323

Source: DSO, 2011-12, p.63

Graph -6.1: Vijayapura District Per Capita Domestic Product (at Current Prices) (2005-06 and 2009-10)

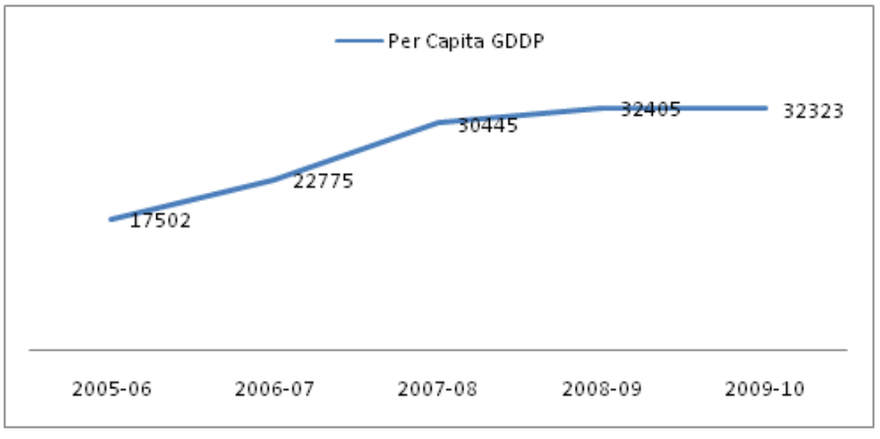


Table- 6.2: Sectoral Contribution to GDDP (2005-06 to 2009-10) (%)

S.No	Year	Primary	Secondary	Tertiary	Total
1.	2005-06	29.20	20.00	50.80	100
2.	2006-07	31.50	20.30	48.20	100
3.	2007-08	37.00	19.00	44.00	100
4.	2008-09	29.80	19.30	50.90	100
5.	2009-10	32.45	22.15	45.40	100

Source : DSO 2009-10, p.53 and 2011-12, p.63

district. Table- 6.1 contains data pertaining to Vijayapura district gross domestic product from 2005-06 to 2009-10 at the current prices.

It is evident from Table- 6.1 that there is a considerable increase in the GDDP and per capita GDDP at current prices between 2005-06 and 2009-10. In 2005-06, the GDDP was Rs. 3,35,047 lakhs, which nearly doubled to Rs. 6,47,041 lakhs in 2009-10. During the same period, the Vijayapura district per capita GDDP increased from Rs.17,502 to Rs.32, 323.

In order to understand the structural changes that are taking place at the district and state levels, it necessary that we should study the contribution of different sectors. A review of relevant literature suggests that as the economy progresses, the share of primary sector declines and that of secondary and tertiary sectors improves. In advanced countries of the world, the contribution of tertiary sector overshadows the contribution of primary and secondary sectors. It is in this context that the contribution of different sectors to Vijayapura district GDDP is examined with the help of Table- 6.2

A look at Table- 6.2 makes it clear that there is no consistency in the contribution of different sectors to the district GDDP, for example, in one year it increases and in the next it decreases. In respect of primary sector, in 2007-08, its contribution was 37 percent, which was highest during the period under study. It drastically reduced to 29.80 percent in 2008-09. We note that in 2007-08, the contribution of tertiary sector declined to 44 percent from 48.20 percent in 2006-07. In 2008-09, it increased to 50.90 percent. Overall,

there is no major change in the sectoral contribution to GDDP in Vijayapura district. However, it can be noted that even though Vijayapura is a backward district, the contribution of tertiary sector is higher than primary and secondary sectors. Between 2005-06 and 2009-10, its average comes to 48 percent. Within the tertiary sector, the best performing areas are construction activities, transport, tourism, finance, health and educational services.

A study of taluk level per capita income will help to understand the inter-taluk differences in the per capita income. It also helps to know difference between district level and taluk level per capita incomes. It will be a convenient tool to determine backwardness or otherwise of the concerned taluk.

It can be seen from Table- 6.3 that amongst all taluks, the per capita income in Basavana Bagewadi taluk is highest. Vijayapura, Sindagi, Indi and Muddebhihal follow. Thus, Basavana Bagewadi taluk occupies first rank and fifth rank goes to Muddebhihal taluk. A reasonable explanation of the difference between per capita incomes in Vijayapura and Basavana Bagewadi taluks is that the population of Vijayapura taluk is larger than Basavana Bagewadi and other taluks.

6.3. Agriculture: Cropping Pattern, Irrigation and Livestock

In Vijayapura district, in 2011-12, 8,77,334 h.a. of land was under agriculture. According to the data in Table- 6.4, amongst all taluks, in Vijayapura taluk, more land was under agriculture, i.e., 25.07%. It was followed by Sindagi (21.53%), Indi (21.52%), Basavana Bagewadi (17.88%) and Muddebhihal (13.98%). It is well known that Vijayapura is known for its scanty rainfall and it experiences long dry spells, disturbing the sowing schedules of the farmers. It is, therefore, necessary that more land in Vijayapura district should be brought under irrigation. The present status of irrigation can be understood with help of Table- 6.4.

At the district level, we find that 35.88 percent of agricultural land is irrigated. In Indi taluk, 53.57 percent of agricultural land is irrigated which is

Graph - 6.2: Sectoral Contribution to GDDP 2005-06 to 2009-10 (in percent)

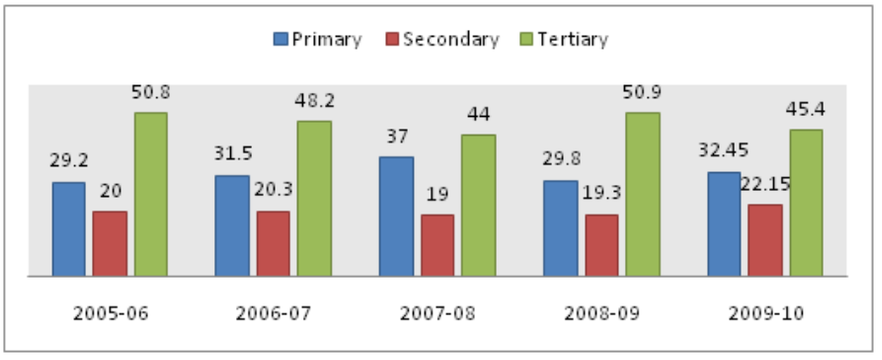


Table- 6.3. Taluk-Wise Per Capita Income 2011-12 (Rs.)

S.No.	Taluk	Per capita Income	Difference	Rank
1.	Basavana Bagewadi	35603	+ 6780	1
2.	Indi	26749	-2073	4
3.	Muddebhihal	22987	-5835	5
4.	Sindagi	28022	-800	3
5.	Vijayapura	29558	+725	2
6.	District	28823	-	

Source : Computed with the help of previous Tables

Vijayapura is known for its scanty rainfall and it experiences long dry spells, disturbing the sowing schedules of the farmers. It is, therefore, necessary that more land in Vijayapura district should be brought under irrigation.

Table-6.4: Taluk-wise Irrigation and Land Utilisation (ha) 2011-12

Sl.No.	Taluk	Land utilized for agriculture	Percent of Dist Total	Net Area Irrigated	Percent of net irrigated area to land utilized for agriculture
1.	Basavana Bagewadi	1,56,941	17.88	45,380	28.91
2.	Indi	1,88,809	21.52	1,01,149	53.57
3.	Muddebhihal	1,22,707	13.98	21,813	17.77
4.	Sindagi	1,88,904	21.53	79,706	42.19
5.	Vijayapura	2,19,973	25.07	66,807	30.37
6.	District	8,77,334	100	3,14,855	35.88

Source: Vijayapura District at a Glance, 2011-12, pp. 55-57

Table-6.5: Annual Rainfall- 2001 to 2011 (in m.m.)

Year	Basavana Bagewadi	Indi	Muddebhihal	Sindagi	Vijayapura	District
2001	501.0	394.7	456.4	517.3	477.2	472.9
2002	432.8	409.4	455.7	427.2	369.9	419.0
2003	187.7	426.6	289.5	444.5	213.2	312.3
2004	543.2	544.6	5443.4	443.2	479.6	510.8
2005	501.7	529.0	628.9	514.2	403.2	530.8
2006	515.6	442.2	461.2	469.1	490.7	475.8
2007	625.5	528.6	639.1	586.6	450.0	566.0
2008	436.3	455.7	496.9	587.7	430.7	493.5
2009	1008.5	806.4	108.2	920.3	874.9	918.3
2010	648.3	567.9	622.5	583.5	551.1	549.7
2011	419.8	376.4	412.0	351.8	278.7	367.7

Source: District At A Glance, 2011-12



highest in the district and higher than the district average of 35.88 percent, this followed by Sindagi (42.19%), Vijayapura (30.37%), Basavana Bagewadi (28.91%) and Muddebhihal (17.77%). Indi is a fortunate taluk because it is the single largest beneficiary of UKP in Vijayapura district.

The annual rainfall in Vijayapura district is 631.6 mm. It starts in June and ends September. Nearly 80 percent rain is received from South-West monsoon. In Vijayapura we note that out of 365 days only forty days are rainy days. As in the case of other parts of India, rainfall in Vijayapura is scanty,

Table-6.6: Important Crops -2010-11 (in h.a.)

S.No	Taluk	Cereals	Pulses	Oil Seeds	Commercial Crops	Fruits	Vegetables
1.	Basavana Bagewadi	80,059 (20.21)	63,279 (16.58)	31,410 (22.56)	35,014 (15.84)	1,042 (6.13)	5,090 (27.43)
3.	Indi	89,484 (22.59)	64,443 (16.89)	33,730 (24.23)	66,045 (29.88)	5,731 (33.15)	3,817 (20.57)
4.	Muddebhihal	40,038 (10.11)	77246 (20.24)	18,278 (13.13)	20,181 (9.13)	3,55 (2.05)	2,635 (14.20)
5.	Sindagi	67,161 (16.95)	10,6282 (27.85)	21,970 (15.78)	53,221 (24.07)	1,894 (10.96)	1,573 (8.48)
2.	Vijayapura	1,19,380 (30.14)	70,374 (18.44)	33,816 (24.29)	46,610 (21.08)	8,264 (47.81)	5,439 (29.31)
6.	District	3,96,122	3,81,624	1,39,204	2,21071	17,286	18,554

Source: Vijayapura District at a Glance, 2011-12, pp. 82-85

uncertain and erratic. Its details can be had from Table-6.5.

Vijayapura is semi-arid area. Rainfall is poor, irrigation facilities are limited and over the years, its ground water level has gone down. In this context, cultivation of certain crops such as paddy, sugar cane, etc., is difficult. Other crops grown in Vijayapura district are cereals, pulses, oil seeds, fruits, vegetables, etc. Data pertaining to the area under cultivation of these crops can be had from Table- 6.6.

It is evident from Table- 6.6 that at the district level, 3,96,122 h.a. area was under the cultivation of cereals; 3,81,624 ha under pluses; 2,21,071 ha under commercial crops; 1,39,204 ha under oilseeds; 18, 554 ha under vegetables and 17286 h.a. under fruit cultivation. It can be, thus, said that maximum land in Vijayapura district is used for the cultivation of cereals. Vijayapura taluk tops in respect of land under cultivation for fruits, cereals and vegetables. Details of the per capita food grain production can be had from Table- 6.7.

It is evident from Table- 6.7 that the district per capita food grain production is 210.21 kgs. Amongst all taluks, Indi occupies the first position where the per capita food grain production is 280.59 kgs. Next to Indi, in Sindagi taluk, per capita food grain production is 233.76 kgs. This is quite understandable because Indi and Sindagi taluk are the maximum beneficiaries of UKP irrigation project. In Vijayapura taluk, the per capita food grain production is 159.18 kgs. It is for the reasons that (1) Vijayapura is more populated than the other taluks and (2) more land in Vijayapura taluk is used for the cultivation of fruits and commercial crops.

An important segment of rural economy is the livestock. It is difficult to imagine any economic activity in rural areas

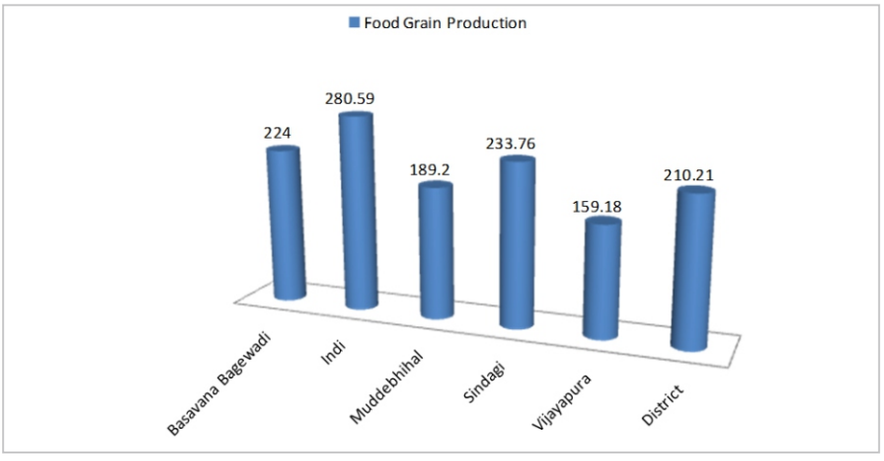
At the district level, we find that 35.88 percent of agricultural land is irrigated. In Indi taluk, 53.57 percent of agricultural land is irrigated which is highest in the district and higher than the district average of 35.88 percent

Table- 6.7: Vijayapura District Food Grain Production: Per capita (in kgs) 2011

S.No	Taluk	Food Grain Production
1.	Basavana Bagewadi	224.00
2.	Indi	280.59
3.	Muddebhihal	189.20
4.	Sindagi	233.76
5.	Vijayapura	159.18
6.	District	210.21

Source: Joint Director, Agriculture Department 2011.

Graph - 6.3 Vijayapura District Food Grain Production: Per capita (in kgs)



Maximum land in Vijayapura district is used for the cultivation of cereals. Vijayapura taluk tops in respect of land under cultivation for fruits, cereals and vegetables.

Amongst all animals, the number of goats is higher than other animals followed by Sheep, poultry, cattle, buffaloes, pigs and others.

without livestock. It not only helps in carrying out agricultural activities, the livestock is also an additional source of income and employment to the people in rural areas. It is in this context that an attempt is made to study the size of livestock in different taluks of Vijayapura district.

It can be seen from Table- 6.8 that the total size of livestock in Vijayapura district is 16,60,048. The size of livestock in Indi taluk (4,11,088) is higher than in any other taluk. This is understandable for the reason that Indi has more than 50 percent of its agricultural area under irrigation. Availability of irrigation facilities helps in the growth of livestock on a sustainable basis. Next to Indi, livestock size is large in Vijayapura taluk (3,38,129) followed by Basavana Bagewadi (3,21,696), Muddebhihal (2,75,135) and Sindagi (2,65,001). Amongst all animals, the number of goats is higher than other animals followed by Sheep, poultry, cattle, buffaloes, pigs and others. By adding to the agricultural income, livestock help rural families to improve their nutrition level, thereby reducing CMR and IMR. Indi is a fine example of these benefits. In Indi, CMR is 25 and IMR is 17, which is less compared to other taluks of the district.

6.4. BPL Households and MGNREGA

It is a well known fact that more number of poor people live in Asia and Africa. In Asia, largest number of poor people can be found in India. Here, the poverty is explained in terms of per capita consumption. It is maintained that 2400 calories per day per person are required for people living in rural areas and 2200 calories for people living in urban areas. Based on this, poverty line is drawn which categorizes households in two broad categories, (1) Percentage of households living below poverty line (BPL) and (2) percentage of households living above poverty line (APL). Arjun Sen Gupta studied the incidence of poverty for the period 1993-94 to 2004-05. He came to the conclusion that 77 percent Indians manage their livelihood with only Rs. 20/- per day. After studying the problem of poverty with

Table- 6.8: Vijayapura District Livestock Cenus 2007

Taluk	Cattle	Buffaloes	Sheep	Goats	Poultry	Pigs	Others	Taluk total
Basavana Bagewadi	42,125 (15.06)	26,310 (13.74)	92,033 (27.39)	90,602 (20.03)	58,134 (18.60)	3,350 (12.34)	1,427 (17.75)	3,12,696
Indi	86,355 (30.86)	63,108 (32.45)	46,100 (13.72)	1,10,943 (24.53)	97,647 (31.25)	6,760 (24.90)	175 (21.87)	4,11,088
Muddebhihal	42,804 (15.30)	24,493 (12.79)	76,677 (22.82)	67,294 (14.88)	59,451 (19.03)	4,229 (15.58)	187 (23.27)	2,75,135
Sindagi	55,127 (19.70)	30,288 (15.81)	28,893 (8.60)	83,758 (18.52)	58,098 (18.59)	8,737 (32.19)	100 (12.5)	2,65,001
Vijayapura	53,374 (19.08)	47, 339 (24.71)	92,312 (27.47)	99732 (22.05)	41,111 (13.16)	4,070 (15.00)	191 (23.87)	3,38,129
District	2,79,785 (100)	1,91,538 (100)	3,36,015 (100)	4,52,329 (100)	3,12,435 (100)	27,146 (100)	800 (100)	16,60,048

Source: Vijayapura District at a Glance, 2011-12, pp.106-107.

the help of different indicators, the 'Oxford Poverty and Human Development Initiative' came to the conclusion that in India 650 million people were living below poverty line. In recent years certain controversies have emerged in the measurement of poverty in the context of Tendulkar Committee and Rangrajan Committee Reports.

Indian government is using both cash (e.g. old age pension) and non-cash (e.g. PDS) means to help poor. Ration cards are provided to the poor households enabling them to procure food grain from ration shops. The following Graph- highlights taluk-wise BPL ration card holders in Vijayapura district.

It is good to note that in Vijayapura district, ration cards are provided to 78.02 percent BPL households. Sindagi taluk tops the list where ration cards are provided to 87.70 percent households. It is followed by Basavana Bagewadi

Graph - 6.4 : Number of BPL Ration Card Holders in Vijayapura (%)

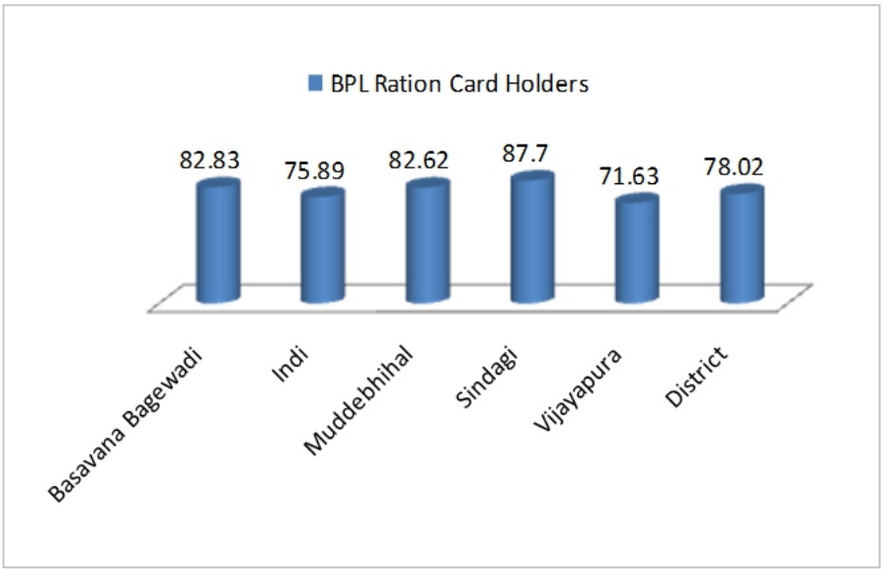


Table-6.9: Taluk-wise MGNREGA Workers 2011-12

S.No.	Taluk	No. of workers registered under MGNREGA	No. of workers Employed under MGNREGA	Percent
1.	Basavana Bagewadi	39,483	11,740	29.73
2.	Indi	51,617	21,920	42.47
3.	Muddebhihal	26,908	9,909	36.82
4.	Sindagi	62,300	25,602	41.09
5.	Vijayapura	63,948	16,398	25.64
6.	District	24,4256	85,569	35.03

Source: ZP Vijayapura, 2011

Incidence of poverty in Vijayapura district is higher in rural areas than in urban areas. Vijayapura rural economy is basically an agricultural economy which greatly lacks in irrigation facilities. In the absence of limited irrigation, in rural areas yearlong employment is not possible.

(82.83%), Muddebhihal (82.62%), Indi (75.89%) and Vijayapura (71.63%).

As pointed out above, incidence of poverty in Vijayapura district is higher in rural areas than in urban areas. Vijayapura rural economy is basically an agricultural economy which greatly lacks in irrigation facilities. In the absence of limited irrigation, in rural areas yearlong employment is not possible. People migrate to urban areas in search of jobs and there they create slums. This is exactly the reason why the numbers of slums in Vijayapura are increasing day after day. It is necessary that efforts should be made to generate yearlong employment opportunities in rural areas, both agricultural and non-agricultural sectors. With this view, the GOI has carved out a well-designed programme of generation of employment in rural areas. It is named after Mahatma Gandhi. Under this programme 100 days of employment is assured to rural unemployed and standard wages are paid. Data pertaining to MGNREGA can be had from Table- 6.9.

It can be noted from Table-6.9 that at the district level 35.03 percent workers were benefitted from MGNREGA. In Basavana Bagewadi their percentage was 29.73; Vijayapura 25.64 percent, Indi 42.47 percent; Muddebhihal 36.82 percent and in Sindagi 41.09 percent. Since Indi is a highly irrigated taluk, it is possible there to provide employment to a large number of workers than in other taluks.

6.5. Landless Persons

Landless households are the one who do not own agricultural lands. Since data of landless households is not available, this figure is worked in an indirect way. We have subtracted the number of landholders from the total population of the respective taluks. Details can be had from Table- 6.10.

From Table-6.10 it is evident that in Vijayapura district, 84.29 percent people are landless. Their number is highest in Vijayapura taluk (88.13%). In other taluks, their number is just above 80 percent. It should be noted here with care that landless persons do not own agricultural land but they may be the owners of commercial, residential and other types of lands.

6.6. Employment and Unemployment

Any discussion on poverty and standard of living is invariably linked to the employment. It is a very comprehensive term, which refers to the productive use of all factors of production, mostly notably the labour. Similarly, unemployment is a major cause of poverty, hunger and poor standard of living. In India, right from the beginning of the First Five year Plan,

the successive five year plans have emphasized the generation of employment opportunities. We have to create employment opportunities for the rural-urban, literate-illiterate, trained and untrained persons. One of the dimensions of this issue is the 'Work Participation Rate' (WPR). The WPR refers to a productive engagement of a proportion of persons to the total persons in the age group 15-60 years. Table-6.11 sheds light on the work participation rate in Vijayapura district.

From Table- 6.11 it is clear that while at the state and district levels, there is a marginal increase WPR, from 44.53 percent in 2001 to 45.62% in 2011 and 39.75 % to 42.61 % respectively. The WPR at the taluk level has recorded a significant improvement. Sindagi has recorded 13.57 percent increase in WPR between 2001 and 2011. Followed by Muddebhihal (11.87%), Indi (10.01%), Vijayapura (8.73%) and Basavana Bagewadi (8.39%). It appears that two major factors have contributed to an increase in WPR. First, there is a consistent improvement in the male-female and rural-urban literacy rates. Secondly, extension of irrigation facilities, particularly in Indi and Sindagi taluks have led to an increase in WPR.

Table-6.12 contains data pertaining to registration of unemployed persons at Employment Exchange Office from 2007-08 to 2011-12.

It is clear from Table-6.12 that in 2007-08, 13,510 persons registered at the Employment Exchange Office, Vijayapura. Their registration declined to 12,595 in 2008-09 and to 12,170 in 2009-10. However, it increased to 12,461 in 2010-11, only to decline to

Table-6.10: Landless Persons in Vijayapura District

S.No.	Taluk	Population	No. of Landholders	Landless Persons
1	2	3	4	5 (=3-4)
1.	Basavana Bagewadi	34,8721	61,504 (17.63)	2,87,181 (82.35)
3.	Indi	42,1169	76,469 (18.15)	3,44,700 (81.85)
4.	Muddebhihal	29,0691	47,174 (16.22)	2,43,517 (83.78)
5.	Sindagi	39,5675	71,489 (18.06)	3,24,186 (81.94)
2.	Vijayapura	72,1075	85,567 (11.86)	6,35,508 (88.13)
6.	District	21,77,331	3,42,203 (15.71)	18,35,128 (84.29)

Source: BDG, 2011-12

Graph - 6.5: Per cent of Landholders and Landless Persons in Vijayapura District

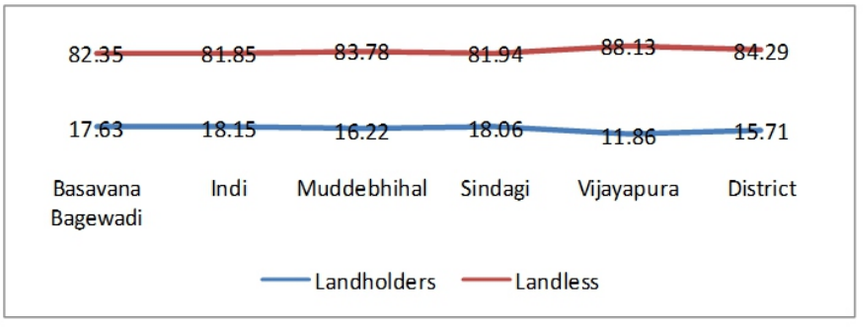


Table-6.11: Taluk-wise Work Participation Rate (2001 and 2011) (in %)

Sl.No.	Taluk	WPR in 2001	WPR in 2011	Difference
1.	Basavana Bagewadi	43.86	52.25	8.39
2.	Indi	41.16	51.17	10.01
3.	Muddebhihal	39.36	51.23	11.87
4.	Sindagi	39.92	53.49	13.57
5.	Vijayapura	36.75	45.48	8.73
6.	District	39.75	42.61	2.86
7.	State	44.53	45.62	1.09

Source: Census of India 2011

Table- 6.12: Registration at Employment Exchange Office (Vijayapura) 2007-12

S. No.	Year	Persons
1.	2007-08	13,510
2.	2008-09	12,595
3.	2009-10	12,170
4.	2010-11	12,461
5.	2011-12	11,457

Source: DSO 2011-12, p.78

Table-6.13: Main Workers in Vijayapura District 2001 & 2011 (in %)

Sl.No.	Taluk	Main Workers (2001)	Main Workers (2011)	Change
1.	Basavana Bagewadi	75.01	79.05	+4.04
2.	Indi	80.42	86.60	+6.18
3.	Muddebhihal	72.35	79.13	+6.78
4.	Sindagi	72.98	83.49	+10.51
5.	Vijayapura	80.10	80.76	+0.66
6.	District	76.85	81.93	+5.08
7.	State	82.28	83.94	+1.66

Source: Census of India 2011.



11,457 in 2011-12. Apparently, it appears to be a good development because the registration at Employment Exchange Office has declined from 13,510 in 2007-08 to 11,457 in 2011-12. The fact, however, is that over the years, registration at employment exchange has lost its relevance. Unemployed persons are now directly contacting their prospective employers, particularly in the private sector and find some jobs.

6.7. Main and Marginal Workers

Main worker is defined as a worker who works for at least 180 days in a year on a regular basis. Similarly, a worker is considered as a marginal worker if he is employed for less than 180 days. The concepts of main and marginal workers are important in the backdrop of rural agricultural economy. These concepts help us to gauge employment scenario in rural areas and accordingly design suitable employment programmes.

We learn from Table- 6.13 that at the state level, there is a very marginal increase of 1.66 in the number of main workers, their percentage increased from 82.28 percent to 83.94 percent. At the district level, there is five-percentage point increase in the number of main workers. In Vijayapura district, Sindagi taluk has recorded 10.51-percentage point increase in the number of main workers; Muddebhihal (6.78%), Indi (6.18%) and Basavana Bagewadi (4.04%) follow it. In Vijayapura, taluk there is a least increase in the percentage of marginal workers. The availability of irrigation in Indi, Sindagi and Muddebhihal taluks has resulted in an increase in the number of main workers. This improves income and standard of living of the concerned main workers and their families. It also helps in improving human development in years to come.

As noted above, marginal workers are the persons who are employed for less than 180 days in a year. The data pertaining to marginal workers in Vijayapura district can be found in Table- 6.14.

It is evident from Table- 6.14 that at the district level, there is an increase in the

percent of marginal workers, from 23.14 percent in 2001 to 31.21 percent in 2011. However, this increase is not evenly spread across the taluks. Their percentage has declined in Basavana Bagewadi by -2.28 percentage points and in Sindagi by -6.33 percentage points. It means that the percentage of main workers has increased in Basavana Bagewadi and Sindagi taluks, which is a good development. In Vijayapura taluk, the percentage of marginal workers has increased considerably from 19.89 percent to 47.13 percent. This indicates that although the work opportunities have increased in Vijayapura taluk, but these opportunities are not of a permanent nature.

6.8. Work Participation by Sex

As noted above, the WPR is a reflection of productive engagement of persons in different income generating activities. In the interest of human development, it is necessary that the WPR, of both men and women must necessarily increase. In respect of Vijayapura district, the WPR of male and female workers is examined with the help of Table-6.15.

Table- 6.15 helps making a comparative study of male-female work participation rate, between 2001 and 2011. It is heartening to note that the WPR of both male and female has gone up. At the district level, female WPR, which was 28.45 percent in 2001, increased to 38.80 percent in 2011. Similarly, during the same period, male WPR increased from 58.48 percent to 61.31 percent. It is also clear from Table- 6.15 that in 2011 female-WPR is stabilized at around 40 percent and male WPR around 60 percent. There are several reasons of increase in WPR in respect of both males and females. For



Table-6.14: Marginal Workers in Vijayapura District 2001 and 2011 (%)

Sl.No.	Taluk	Marginal Workers (2001)	Marginal Workers (2011)	Change
1.	Basavana Bagewadi	24.98	22.77	-2.28
2.	Indi	19.58	20.52	+0.94
3.	Muddebhihal	26.98	37.13	+10.32
4.	Sindagi	27.02	20.69	-6.33
5.	Vijayapura	19.89	47.13	+27.24
6.	District	23.14	31.20	+8.06

Source: Census of India 2001

Table-6.15: Gender-wise Work Participation (in %) Rate 2001 and 2011

S.No.	Taluk	2001		2011	
		Female	Male	Female	Male
1.	Basavana Bagewadi	35.78	51.62	41.51	62.72
2.	Indi	30.51	51.05	40.64	61.02
3.	Muddebhihal	27.99	50.51	40.11	62.24
4.	Sindagi	29.50	49.85	44.84	61.76
5.	Vijayapura	22.87	49.87	30.52	60.19
6.	District	28.45	50.48	38.80	61.31

Sources: BDHDR-2008, p.136 and Census of India 2011



Table- 6.16: Taluk-wise Occupational Pattern (in %) 2011

Sl.No	Taluk	Cultivators	Agricultural Labourers	Cottage Industries workers	Other Workers
1.	Basavana Bagewadi	28.11	43.91	2.74	25.24
2.	Indi	36.56	40.01	1.86	21.54
3.	Muddebhihal	22.91	37.55	4.05	35.47
4.	Sindagi	33.68	45.30	1.85	19.16
5.	Vijayapura	21.96	28.65	3.25	46.13
6.	District	28.26	37.90	2.73	31.10
7.	State	23.61	25.67	3.28	47.44

Source: Census of India 2011.

The occupational pattern of the district reflects that in Vijayapura district 66.16 people are engaged in agriculture, i.e., 28.26 percent cultivators and 37.90 agricultural labourers.

example, firstly at the macro level, during the decade 2001-2010, India and Karnataka have experienced a growth rate of 6.5-7 percent. This created huge work opportunities. Secondly, both the central and state governments have implemented several employment generation schemes. Thirdly, during the same period, there was a considerable improvement in male and female literacy rates.

6.9. Occupational Pattern

Broadly speaking there are three sectors of an economy, i.e., primary, secondary and tertiary. It is an observed fact that as the economy grows its occupation pattern changes. By displacing primary and secondary sectors, the tertiary sector becomes dominant. Table- 6.16 throws light on the occupational pattern in Vijayapura district

from Table- 6.16 that at the district level, 28.26 percent are cultivators, 37.90 percent are agricultural labourers, 2.73 per cent are cottage industries' workers and 31.10 percent are other workers. The percentage of cultivators is more in Indi (36.56%) and Sindagi (33.68%). Similarly, the percentage of agricultural labourers is also high in these two taluks. This is mainly because of better irrigation facilities in these two taluks. The percentage of cottage industries' workers is more in Muddebhihal (4.05%). Other workers are more in Vijayapura taluk (46.13%) than in any other taluk. This is due to the fact that in recent years, Vijayapura has emerged as a centre of educational, health, construction, transport and commercial activities. These activities provide employment opportunities outside agriculture. On the whole, the occupational pattern of the district reflects that in Vijayapura district 66.16 people are engaged in agriculture, i.e., 28.26 percent cultivators and 37.90 agricultural labourers.

6.10. Child Labour

Child labour is another reflection of incidence of poverty. The practice of child labour goes against the legal and moral work norms. In order to supplement family income, poor people, however, force their children to work. These children fail to continue their education, get dropped out from schools and in all probability engage themselves in anti-social activities. The

girls from poor families start attending domestic chores, and look after younger siblings from very young age. The number of dropouts starts increasing as soon as they reach upper primary schools. They start taking up family responsibilities. Their dropout rate is 11.36 percent.

Child labourers are found in the following works: goat and cattle herding; garage works; domestic helpers; bricks making; construction works; hotels; shops assistants; roadside vendors; rag picking, etc. Some activities like rag picking, working in fireworks manufacturing, etc., are hazardous to the health of children. Table-6.17 provides details of child labourers in Vijayapura district.

It is evident from Table-6.17 that between 2000-01 and 2004-05 at the district level, the number of child labourers has almost remained same. In Vijayapura taluk we find a marginal increase in their number. However, according to a survey carried out by District Labour Office, there is a drastic decline in their number, which has declined from 2000 in 2004-05 to 1252 in 2011-12.

The Government of Karnataka has started special schools for child labourers so that they continue their education and get mainstreamed. Table-6.18 throws light on number child labourers studying in special schools.

The data in Table- 6.18 suggests that in Vijayapura district, in 2012-13, 1250 child labourers were admitted in special schools. When compare this number with the previous number of 1252 of 2011-12, it appears to us that almost all children are admitted in special schools.

Table-6.17: Number of Child Labourers in Vijayapura District

Sl.No.	Taluk	2000-01	2004-05	2011-12
1.	Basavana Bagewadi	150	100	198
2.	Indi	300	300	168
3.	Muddebhihal	300	300	210
4.	Sindagi	100	100	170
5.	Vijayapura	1150	1200	506
6.	District	2000	2000	1252

Source: V-DHDR-2008, p.113 and District Labour Office, Vijayapura.

Table- 6.18: Number of Child Labourers Admitted to Special Schools 2012-13

S. No.	Taluk	Number
1.	Basavana Bagewadi	150
2.	Indi	150
3.	Muddebhihal	200
4.	Sindagi	150
5.	Vijayapura	600
6.	District	1250

Source: District Labour Office, Vijayapura, 2012-13

It is necessary that this number should be accepted with caution.

Governments at the centre, state and local levels are serious about the phenomenon of child labour. Every year, in order to create awareness, a number of campaigns are undertaken. Strict vigilance is also kept on organizations that are likely to employ children. Surprise checks are also carried out. Their rehabilitation is also viewed seriously. Table- 6.19 contains data pertaining to rehabilitation of child labourers.

It is evident from Table-6.19 that in 2001 in Vijayapura district, 500 child

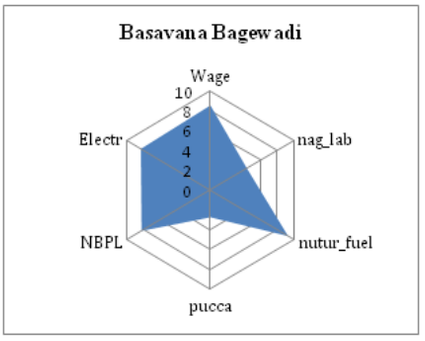
According to a survey carried out by District Labour Office, there is a drastic decline in their number, which has declined from 2000 in 2004-05 to 1252 in 2011-12.

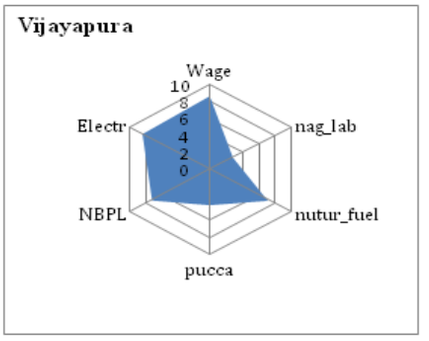


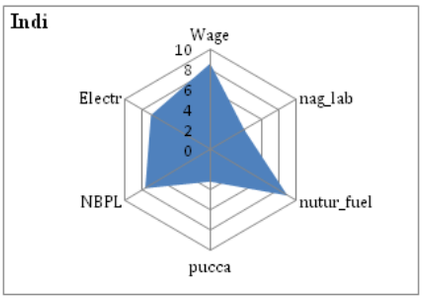
Table- 6.19: Number of Rehabilitated Children In Vijayapura District- Social Groups 2001-2013

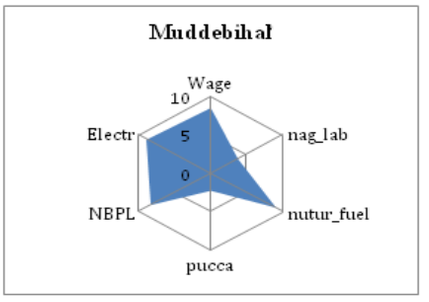
S.No.	Category	2001	2013
1.	SC	42	331
2.	ST	15	73
3.	Minorities	152	463
4.	Others	291	320
5.	Total	500	1187

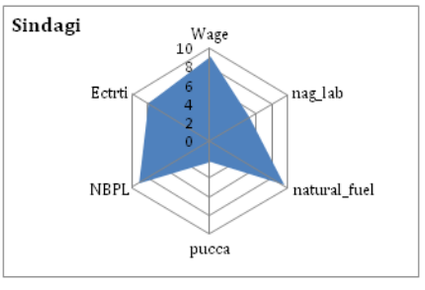
Source: V-DHDR 2008, p.113 and District Labour Office, Vijayapura, 2012-13

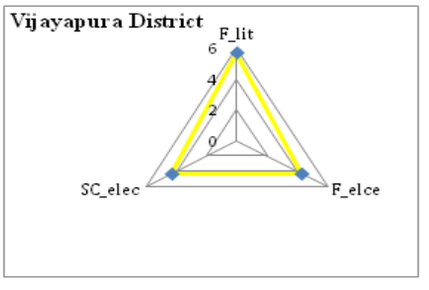












labourers were rehabilitated. It is also clear from this Table- 6.19 that 291 rehabilitated children belonged to others' category, followed by minorities (152), SC (42) and ST (15). Their number increased to 1187 in 2013 of which 463 children were from minorities. The number of children belonging to other groups is as follows: Others (320), SC (321) and ST (73). Table- 6.19 makes it clear that the number of rehabilitated children has increased from 500 in 2001 to 1187 in 2013. Their number has also increased across the social groups where children from minorities are more in number. In the process of rehabilitation, a number of NGOs are involved.

6.11. Radar Analysis for Living Standard

Radar figures are used to understand the level of living standard with the help of six indicators. These indicators are proportion of non-agricultural labour, traditional fuel, pucca houses, BPL households, electricity and wages of agricultural labourers. Excepting Vijayapura taluk, the living standard condition in other taluks is almost same.

6.12. Small Area Study

Dryland Farm Technology And Human Development

There is a strong argument that the single most important factor contributing to the human development is a consistently high level of income. Countries enjoying high per capita incomes are the ones who enjoy high ranking in worldwide HDI and vice versa. In this context, the dominant issue in the present small area study is how to contribute to the human

development in an area, which is predominantly dry and where droughts occur regularly.

Dryland farming means "a practice of growing profitable crops without irrigation in areas which receive an annual rainfall of 500 mm or even less." Prominent features of dry lands are the uncertain, ill-distributed and low annual rainfall. In such areas, cropping is relatively difficult as it mainly depends on intensity and frequency of rainfall. India has about 47 million hectares of dry land, which contributes 42% of the total food grain production in the country. These areas produce 75% of pulses and more than 90% of sorghum, millets, groundnuts and pulses from arid and semi-arid regions.

Dry lands, besides being water deficient, are characterized by high evaporation rates, exceptionally high day temperature during summer, low humidity and high run off and soil erosion. The soils of such areas are often found to be saline and low in fertility. As water is the most important input, inadequacy and uncertainty of rainfall often cause partial or complete failure of crops leading to scarcities and famines. Thus, the life of both human beings and cattle in such areas is difficult and insecure.

Vijayapura is one such dry land area. Its total cultivable area is 969909 hectares (BDG, 2012-13, pp.54-57) out of which net irrigated area is 293690 (27.87%) and remaining 72.13 % is rain fed area. Taking into account the frequent droughts, the British government, in 1933, established agriculture research centre at Hittanalli village in Vijayapura taluk. This centre was one among five dryland farming research centres established during 1933-1935. In 1984, the centre was upgraded as the main centre. It is now known as Regional Agricultural Research Station (RARS). The major objective of the centre is: "To evolve simple technology through inter-disciplinary research to substantially increase the crop productivity under dryland farming conditions in India". Over the years, the RARS developed and provided suitable

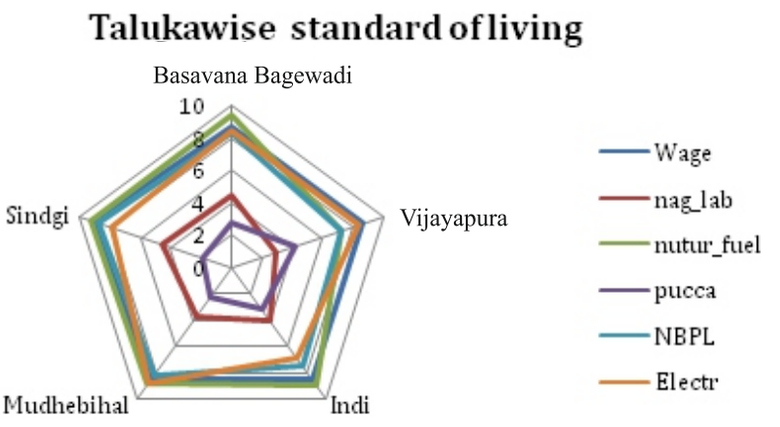


Table- 1: Dryland Technology in Kavalagi and Honwad (in percent)

S.No.	Type of Technology	Kavalagi n=28	Honwad n=25
1	Compartment Bunds	23.30	60.66
2	Wider row spacing	21.35	17.77
3	Intercropping	21.35	20.00
4	Counter Bunds	10.67	16.66
5	Seed Harding	05.82	03.33
6	Tied Ridges and Furrows	04.85	04.54
7	Levelling	06.79	12.22
8	Check dam	02.91	03.33
9	Rain Harvesting	02.91	02.22
10	Power Spray	00	03.33
	Total	100	100

Source: Field work.

Table- 2 : Jowar Production in quintals

Sl No	Quintals	Kavalagi		Honwad	
		Pre-technology	Post-technology	Pre-technology	Post-technology
1	0-5	19 (67.85)	06 (21.42)	18 (72)	05 (20)
2	5-10	06 (21.42)	08 (28.57)	03 (12)	04 (16)
3	10 and above	03 (10.71)	14 (50)	04 (16)	16 (64)
	Total	28	100%	25	100%

Source: Field work

Table No. 3: Sunflower production in quintals

Sl No	Quintals	Kavalagi		Honwad	
		Pre-technology	Post-technology	Pre-technology	Post-technology
1	0-5	15 (53.57)	05 (17.85)	17 (68)	03 (12)
2	5-10	09 (32.14)	07 (25)	03 (12)	04 (16)
3	10 and above	04 (14.28)	16 (57.14)	05 (20)	18 (72)
	Total	28	100%	25	100%

Source: Field work

technology for dryland areas. These are compartment bunding, wider row spacing, tied ridges & furrows, inter cropping, seed harding, etc.

Methodology

For the purpose of present study Kavalagi and Honwad villages of Vijayapura taluk are selected because these are RARS adopted villages. Only those farmers are covered who are using dryland technology suggested by RARS. In Kavalagi 56 farmers and in Honwad 50 farmers are using RARS technology. Out of this, the present study has selected 28 (50%) farmers from Kavalagi and 25 (50%) farmers from Honwad on a random sample basis. These farmers are using RARS technology for the last 8-10 years. Primary data is generated by adopting survey method and the secondary data is collected from published reports, journals, research articles, etc. From time to time, the RARS, Vijayapura, suggests the use of different technologies to the farmers in and around Vijayapura district. These technologies are suggested taking into account the requirements of the area. These are: compartment bunds, wide row spacing, intercropping, counter bunds, seed-harding, tied ridges and furrows, levelling, check dams, rain harvesting and use of power sprays. The following Table No.1 throws light on the number of respondents using different types of technology.

Out of the above ten techniques, the following four are more popular amongst the farmers of Kavalagi and Honwad villages; compartment bunds; wider row spacing, intercropping and counter bunds.

Impact on Production

Know proceed to examine the impact of these technologies on the level of income through changes in production levels during the last 8-10 years. For this purpose two crops, one rabi crop (jowar) and one kharif crop (sunflower) are chosen. The findings are summarized in the following tables.

From the above Table-2 it is quite clear that in the pre-technology period 19 (67.85 %) respondents from Kavalagi were getting jowar production between 0-5 quintals. Jowar production was more than ten quintals in respect of only three (10.71) respondents. Now, in the post-technology period, the change in the quantity of production may be

noted. The number respondents who have recorded an increase in the production increased. For example, compared to the pre-technology period, now 14 (50%) respondents are getting more than 10 quintals jowar annually. The number respondents who were getting less than 5 quintals has declined from 19 (67.85 %) to 6 (21.42 %). Similar is the story in Honwad village where the number of respondents getting more than 10 quintals has increased from 4 (16 %) to 16 (64 %). This indeed is a very positive impact of dry land technology suggested by RARS.

Let us now proceed to examine the impact of technology in respect of sunflower production, which is a kharif crop. Currently, sunflower is the most popular kharif crop in the dryland areas of Vijayapura. It is a commercial crop and fetches good price in the market.

From the Table-3, it is clear that in the pre-technology period 15 (53.57 %) respondents from Kavalagi were getting sunflower production not exceeding 5 quintals. Sunflower production was more than ten quintals in respect of only four respondents (14.28%). The change in production in the post-technology period may be noted. The number of respondents experiencing an increase in the production has gone up. For example, compared with the earlier period, now 16 (57.14 %) respondents are getting more than 10 quintals of sunflower production. The number respondents who were getting less than 5 quintals has declined from 15 (53.57%) to 5 (17.85 %). Similar is the experience of respondents from Honwad village where the number of respondents getting more than 10 quintals has increased from 5 (20 %) to 18 (72 %). This is clearly because of

Table No. 4: Income Levels in Pre-Technology period

S. No	Income (Rs.)	Kavalagi	Honwad
1	0-10000	02 (7.14%)	08 (32%)
2	10000-20000	18 (64.28%)	08 (32%)
3	20000-30000	04 (14.28%)	04 (16%)
4	30000-40000	02 (7.14%)	03 (12%)
5	40000-50000	02 (7.14%)	02 (08%)
	Total	28 (100%)	25 (100%)

Source: Field work

Table- 5: Income Levels in Post-technology period

Sl No	Income (Rs.)	Kavalagi		Honwad	
		No. of respondents	Percent	No. of respondents	Percent
1	0-50,000	03	10.71%	05	20%
2	50,000-100,000	05	17.85%	06	24%
3	100,000 and above	20	71.42%	14	56%
	Total	28	100%	25	100%

Source: Field work

Table-7: Education Level of the Respondents

Generation	Kavalagi		Honwad	
I Generation	No schooling	100 %	No schooling	100 %
II Generation (Respondents)	No schooling	06 (21.42%)	No schooling	05 (20 %)
	Primary	15 (53.57)	Primary	07 (28%)
	Secondary	04 (14.28%)	Secondary	07 (28%)
	Higher	03 (10.71)	Higher	06 (24 %)
	Total	28 (100 %)	Total	25 (100%)
III Generation (Dependents)	Schooling	100%	Schooling	100 %
	Primary	16 (61.53 %)	Primary	19 (76 %)
	Secondary	08 (30.06 %)	Secondary	04 (16 %)
	Higher	02 (7.69 %)	Higher	02 (08 %)
	Total	26 (100 %)	Total	25 (1005)

Source: Field work

Table- 8: Number of Deliveries Between 2008-13

S. No.	No. of Deliveries	Kavalagi	Honwad
1	Nil	11 (39.28 %)	14 (56%)
2	01	09 (32.14)	05 (20%)
3	02	03 (10.71 %)	04 (16 %)
4	03	02 (7.14 %)	02 (08%)
5	04	03 (10.71%)	00 (00%)

Source: Field work

Table- 9: Place of Deliveries Between 2008-13

S. No.	Place of Deliveries	Kavalagi	Honwad
1	Government Hospital	07 (38.88 %)	07 (63.63 %)
2	Private Hospital	09 (52.94%)	02 (18.18%)
3	Home	01 (5.55 %)	02 (18.18 %)
4	Total	17	11

Source: Field work



dryland technology suggested by RARS.

Impact on Income

The other way of looking at the impact of dryland technology is to study the changes in the income levels of respondents, which is normally taken as a satisfactory indicator of a change in the economic condition. This is the reason why the different notions of income are used such as per capita income, gross domestic income, income at factor cost, real income, net income and so on. It is noted in the above paragraphs that, following the adoption of dryland technology, there is a significant change in the production of two crops namely jowar (rabi crop) and sunflower (kharif crop). This increase in production is reflected in terms increase in the income of the respondents. The findings, on a comparative basis, are summarised as under :

In the pre-technology period, in Kavalagi village, 18 (64.28 %) were found earning between Rs.10,000 and Rs.20,000. A very few, i.e., only two (7.14 %) were earning between Rs.40,000-50,000. More or less similar was the situation in Honwad village where 16 (64%) were earning below Rs. 20,000. Only 2 (8%) respondents had income between Rs. 40,000-50,000. In the post-technology period, the change in the income levels is as under:

On account of adoption of dryland technology, a significant change in the income levels of the respondents is noted. Now in Kavalagi village, 20 (71.42 %) respondents are earning more than a lakh rupee. In Honwad village also 14 (56 %) respondents are earning more than one lakh rupees. This definitely is a significant change in the income levels. These findings corroborate the findings pertaining to an increase in the production of jowar and sunflower crops in Kavalagi and Honwad villages. Following the adoption of technology, more farmers are found placed in higher income slabs. Suffice it to say, the technology as developed and suggested by the RARS has proved beneficial to the farmers of Kavalagi and Honwad villages. There is a significant increase in the production and improvement in the income levels. This has come as a boon to the farmers in dryland areas.

The Issue of Human Development

The available literature on human development claims that there is a close relationship between income levels and human development. High income

facilitates and promotes education in addition to improved access to health. This argument was applied to our study of these two villages using RARS suggested dryland technology. In these two villages there is an improvement in income levels followed by increase in production levels. As a result, persons from respondents' families are now pursuing education and opt for institutional deliveries in large numbers.

Education level of the Respondents

Education, commonly expressed in terms of literacy, is understood as the ability of persons to read and write with understanding at least in one language. Through a suitably designed questionnaire, the data pertaining to three generations was collected. First generation means father-mother, grandfather-grandmother of the present respondents. Respondents were treated as belonging to second generation and their children were treated as the third generation.

It appears from the above that the first generation had no schooling. This could have been because of the ignorance of their parents; poverty; lack of access to schools, etc. Things began to change only in the recent years when, in the area of primary education, the government became proactive. This, along with an improvement in income levels, has led to 100 percent schooling of the respondents in Kavalagi and Honwad villages.

Institutional Deliveries

Health is a multi-dimensional issue. It covers life expectancy, IMR, MMR, CMR, etc. The present small area study is confined to the issue of institutional deliveries. Primary data was collected pertaining to the number of deliveries during the last five years, 2008-13. The following Table-7 sheds light on the total number of deliveries recorded in Kavalagi and Honwad villages.

Table- 10: Dry Land Practices in Kavalagi and Honwad: Feed Back from Farmers

S.No.	Immediate Response	Kavalagi	Honwad		
		n=28	percent	n=25	Percent
1	No idea	00	00	00	00
2	Better	24	85.71	18	72
3	Good	04	14.28	07	28

Source: Field work

It clear from the above Table- 7 that no delivery took place in respect of 11 (39.28 %) respondents' families from Kavalagi and 14 (56%) respondents' families from Honwad villages. One delivery was recorded in respect of 09 (32.14%) and 05 (20%) respondents' families from Kavalagi and Honwad respectively. Likewise, three deliveries were recorded in 02 (7.14 %) respondents' families in Kavalagi and 02 (08%) in Honwad. This led us to the examination of place of deliveries of which there were three possibilities: home, private and government hospitals. Deliveries in private and public hospitals are treated as institutional deliveries. These are preferred on account of their long term favourable impact on the health of both mother and child.

It is clear from the above Table No. 8 that the numbers of institutional deliveries are more than deliveries done in homes. For example, only 01 (5.55 %) and 02 (18.18 %) deliveries were



recorded in Kavalagi and Honwad villages respectively.

Feedback from Farmers

An attempt was made to obtain the feedback from the respondents in Kavalagi and Honwad villages in respect of the performance of RARS. It is clear from Table-10 that there is not a single person who does not know about RARS. In Kavalagi village 85.71 percent and in Honwad village 72 percent respondents said that the performance of RARS is better, whereas 14.28 percent from Kavalagi and 28 percent respondents from Honwad reported that the performance of RARS is good.



Conclusion

1. On account of adoption of RARS suggested dry land technology, production of two major crops, jowar and sunflower, has increased.

2. Consequent to increase in production, respondents' income levels have improved in the post-technology period.

3. Hundred percent schooling is reported in respect of 'third generation'.

4. Maximum deliveries are now recorded in government and public hospitals.

'Schooling' and 'institutional deliveries' are the two important aspects of education and health. Although the findings of the present study are convincing, yet two limitations may be noted. First, the number of respondents is less. Secondly, it is very difficult to delineate the effect of proactive role of the government in improving access to education and health.

6.13. Concluding Remarks

In this chapter we have discussed income, poverty and employment in Vijayapura district. For this particular purpose the following issues were covered: district and taluk income; cropping pattern; irrigation; livestock; BPL households; MGNREGA; landless households; main and marginal workers; WPR; occupation pattern; child labour and its rehabilitation. A few major observations are that Vijayapura is still a predominantly agricultural society. There is an absence of strong manufacturing activities. Less percentage of cultivable area is under commercial crops since irrigation facilities are limited. The number of landless households is very high. The WPR has improved in respect of both the genders. Primary sector is a major source of employment. The practice of child labour is still existing indicating presence of poverty.

For an overall improvement in the level of income and employment of Vijayapura district, it is necessary that more land area should be brought under irrigation. Since Vijayapura is a dry area with limited irrigation facilities, dry land farming technology should be popularised. Rain harvesting and different techniques of soil and water conservation should be popularised. In the areas where fruits are grown in a large scale, arrangements should be made for cold storage facilities. Efforts should be made to provide required impetus to the manufacturing activities.