

Status and Prospects of Employment Generation and Wage Enhancement in Rajasthan 2024–2029

March 2024



RAJIV GANDHI INSTITUTE FOR CONTEMPORARY STUDIES

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1 Context of unemployment problem in Rajasthan

Rajasthan is the largest state in India. It has an area of 3,42,239 square kilometres. The population of the state is 6.85 crores. The sex ratio is 928. Literacy rate is 66.11%. The state is distributed across ten divisions, 50 districts, 295 blocks, 11,316-gram panchayats and 44,672 villages. The population of scheduled caste (SC) is 17.83% and scheduled tribe (ST) 13.48%.

The Gross state domestic product (GSDP) of the state is Rs. 14,13,620 crores at current prices and Rs. 7,99,449 at constant prices during 2022–23. The sectoral share of various sectors in GSDP was primary sector 28.95%, secondary sector 27.31% and services 43.74%. The Gross value added by primary sector was Rs. 3,79,439 crores, secondary sector Rs. 3,58,034 crores and tertiary sector Rs. 5,73,277 crores. The per capita income of Rajasthan is Rs. 1,35,218 at current prices.

Unemployment among youth was found to be high at 12.5% in 15-29 age category with male and female unemployment at 14.4% and 9% respectively as per PLFS 2022-23. Within youth, rural unemployment stood at 9.6% and urban unemployment at 24.1%. Within the working age population 15-59, the unemployment rate was 4.9% with male and female employment at 6.0% and 3.2%, respectively. Educated youth unemployment is an emerging problem. While different sectors of the economy are growing, particularly the primary and tertiary sectors, it has not been adequately creating employment opportunities.



Source: Image

Recruitments in public employment are limited by vacancies available and possibilities for recruitment, though it continues to be the preferred choice. Private sector employment is only providing employment to those at the higher levels of the pyramid with higher level technical skills. Many government vacancies are said to be unfilled.

The social and psychological stress created by unemployment also results in mental health issues. Many of the distressed are from SC, ST and OBC. Given this scenario, there is a need to assess the unemployment situation in Rajasthan and identify potential solutions. A study was conducted in Rajasthan to assess the scenario of various socio-economic segments and occupational groups related to their employment & unemployment status and wage income status.

The scope of the study was four-fold. The first was to conduct a macro-analysis of developmental challenges including in livelihood and unemployment status among the socio-economic segments and occupational groups.

Secondly, to conduct micro-analysis of developmental challenges including in aspects of employment and livelihoods as witnessed in rural and urban settings by the socio-economic segments and occupational groups. Thirdly, to understand the gaps in the current programs and policies which does not necessarily address the current deficits. Fourthly, to recommend suggestions which address development deficits among socio-economic segments and occupational groups including in livelihoods and employment and improve their overall development status.

Four districts were analysed to get the pattern of livelihood scenario which included Alwar, Dausa, Jaisalmer and Sikar.



Source: Image

1.1 Aspirations of various socio-economic segments

The development and livelihood aspirations of the socio-economic and occupational segments are as follows:

Social and Occupational Segment	Current Endowments	Aspiration for development and livelihoods in Rajasthan
Scheduled Caste	 Constitutional provisions for SC protection Affirmative Action in public services Welfare and Empowerment schemes Livelihood Skills Growing educational levels SC Sub-Plan, Finance corporation 	 Access to quality education Eradication of Caste discrimination Land ownership. Safe, secure, and sustainable livelihoods Effective implementation of affirmative action policies Higher and more effective representation in politics and higher public offices
Scheduled Tribes	 FRA guarantees land ownership and pattas. Tribal sub-plans with provisions for dedicated funds Scope for participation in local governance through PESA Assets - Land Livelihood skills Growing access to education 	 Protection of traditional lands and resources Effective implementation of forest rights act Access to healthcare and educational facilities in tribal areas. Sustainable livelihood options. Increased participation in decision making process. Assured benefits under PESA for tribal areas
Minority	 Minority institutions – Minority finance corporation, Waqf Boards, Minority commission and welfare departments Growing levels of education Livelihood skills in non-farm sector NGOs and Community organizations working for minority welfare 	 Equal access to opportunities Nondiscrimination in day to day lives. Representation in government and public institutions Access to education Access to quality employment opportunities
Youth	 Growing levels of education Availability of opportunities for enhancing skilling by state skill development program Availability of opportunities for mentorship in entrepreneurship – training R-SETI-, DIC, finance support MFIs 	 Access to quality education and skill development Access to employment opportunities Support for enterprise – financial, legal, business guidance and mentoring. Meaningful participation in public life and decision making. Increased voice and representation on public issues
Women	 Growth of SHG movement contributing to widening access to finance, social capital and livelihood skills Growing educational levels of women and families more open to girl child education Women focused welfare and development programs in the state Increased opportunities for accessing skill programs and finance. Increased representation in local governance Availability of institutions such as R-SETI for entrepreneurship training 	 Gender equality and freedom from discrimination Access to quality education and healthcare Economic empowerment and secure livelihoods Safe and secure employment Higher voice and representation

Social and Occupational Segment	Current Endowments	Aspiration for development and livelihoods in Rajasthan
Small and Marginal farmers	 Programs for input assistance, irrigation, credit access such as KCC, procurement programs through MSP Availability of institutions to support farmers in extension – KVKs, ATMA Traditional farming skills of the farmers Emergence of collectives – FPOs 	 Improved productivity from land Improved irrigation infrastructure and access to water Financial assistance and access to credit Adoption of modern farming techniques and crop diversification Assured price for produce
Agricultural workers	 Programs of livelihood security – MGNREGA contributing to increased wage income Scope for taking up cultivation through land leasing and land ownership. Availability of alternative livelihood options 	 Improved wage incomes Opportunities for land ownership Diversification of livelihood opportunities Protection for agricultural workers
Informal sector workers (manufacturing and service)	 Legal provisions for worker welfare – minimum wages, inter-state migrant workers act, social security welfare boards Availability of institutions to assist in labor rights – Trade Unions, India labor line, occupation specific worker collectives 	 Improved livelihood and social security Access to rights of workers Access to skill development programs Access to financial services for setting enterprise Community ownership of enterprises



Source: Image

1.2 Development challenges and livelihoods situation of socio-economic segments and vulnerable groups

The development and livelihood challenges of socio-economic segments and occupational groups in the state that emerged are as follows: -

Social Segment	Development Challenges	Livelihood challenges
Scheduled Caste	 Low literacy and education levels Social discrimination in access to basic amenities and services Poorer access to healthcare services with implications on health Occupational segregation and restriction to caste based occupations. Low political representation. 	 Limited social mobility beyond caste based occupations. Landlessness Discrimination in private sector employment Disproportionately represented in low paying, informal sector jobs Limited access to credit, markets and government schemes hindering ability to start business. Limited access to skill development and employment opportunities Benefits under SC sub-plans and SC finance corporation not forthcoming as expected
Scheduled Tribes	 Presence in arid and semi-arid locations with degraded and small lands Skill upgradation limited. High illiteracy particularly for the girl child Health care facilities poorly understaffed Land alienation and loss of traditional resources. Poor infrastructure in tribal villages – roads, electricity, sanitation facilities, drinking water. Social discrimination and exclusion 	 High dependence on traditional livelihoods Low productivity in agriculture Ineffective implementation of forest rights act (FRA) Limited access to skill development and employment opportunities Low market access and difficulty in marketing tribal produce Benefits under ST sub-plans and ST finance corporation not forthcoming as expected
Minority	 Low level of education and reliance on traditional / religious education Lower access to quality health care Lower living standards Low political representation Lack of comprehensive programs for socio-economic development of Minority population 	 Limited to informal employment with low wages and lack of social security Inadequate access to skill development opportunities Lack of access to financial capital hindering entrepreneurship and business opportunities Benefits through Minority finance development corporation not upto required limit
Youth	 High level of unemployment particularly among educated youth. Skill mismatch between evolving job market needs and skills possessed. Unequal access to quality vocational / skill education Limited civic engagement and a sense of feeling disenfranchised. Limited opportunities in non-traditional livelihood occupations 	 High focus on government employment Challenge of educated unemployment. Predominant employment in informal jobs Limited access to vocational training and career guidance Lack of entrepreneurship support to access finance, mentoring and incubation facilities Limited opportunities for income enhancement Rural Urban migration in search of employment opportunities

Social Segment	Development Challenges	Livelihood challenges
Women	 Low female illiteracy rate Limited access to quality education Deep rooted patriarchal norms reinforce gender inequalities. Gender stereotyping leading to restriction of employment choices for women. Prevalence of child labour among certain communities Low access to health care – reproductive health issues Domestic violence and Gender based discrimination. Lack of land ownership and inheritance rights Financial dependence on men hinders women's empowerment. Limited role in household and livelihood decision making 	 Low female labour force participation rates (LFPR) Work participation is limited to low paying informal jobs or unpaid domestic work. Land ownership in name of men prevents women from accessing control over agricultural resources and income generation potential. Limited employment opportunities for women due to low growth of sectors with potential for women employment Inadequate skill development trainings focused on exclusive women centric livelihood skills. Challenges related to women in informal sector related to work, income and working conditions – domestic workers, workers in handicraft sector
Small and Marginal farmers	 Limited land holdings limit scope for investing in farm improvements. Arid status of the state restricts access to irrigation leading to dependence on erratic rainfall. Inadequate infrastructure like roads, storage facilities and markets limit's ability to transport produce and get fair prices. Inadequate access to credit and technology limits productivity Inadequate benefits from weather insurance schemes 	 Low crop yields and income Predominance of subsistence farming Low crop diversification Vulnerability to climate changes Low bargaining power of farmers to determine prices and limited scope of minimum support price (MSP) mechanism. Debt burden of the farmers Inadequate loss compensation through fasal Bheema yojana Minimum support price (MSP) limited to few crops
Agricultural workers	 Low wages and informal employment Limited education and skill employment Limited opportunities for wage enhancement Lack of adequate employment opportunities 	 Seasonal unemployment and underemployment Irregularity of work and income Landlessness Low livelihood diversification Lack of alternative livelihood options Lack of schemes for income enhancement of agricultural workers Migration for work and family separation
Informal sector workers (manufacturing and service)	 Lack of livelihood and social security Unstable and unpredictable income Limited access to opportunities for education, skilling, and training Vulnerability to shocks and crises Lack of formal recognition and voice Occupational hazards and lack of protection from risks 	 Informal employment relations No work contract, paid leave, social security Low wages Competition for jobs leads to Job insecurity. Poor working conditions Exploitation by middlemen and agents who extract commissions for finding employment thus reducing earnings. Limited opportunities for wage enhancement



2 Highlights of Labour and Employment Status in Rajasthan



2.1 LFPR and WPR across various social categories

Source: Image

LFPR reduces with more advantageous social position. At the national level, in case of more disadvantaged Scheduled Tribes, it was 49.2%, followed by Scheduled Castes 41.2%, Other backward castes 40.7% and others 39.4%. Similar thing is found with WPR, where it was Scheduled Tribes 48.0%, Scheduled Caste 39.4%, Other backward castes 39.1% and other 37.5%.

While higher LFPR and WPR among disadvantaged groups indicates a positive trend, it is also a result of lower returns on labour work undertaken. The lower returns from labour activities forces a greater number of household members to engage in labour work.

Similarly, in socially advantaged households, as there are economic advancement members from households particularly females are made to withdraw from labour engagement.

LFPR and WPR among the upper decile groups in Rajasthan was higher than the overall state LFPR and WPR rates and the unemployment rates. In Rajasthan, while LFPR was 42.6% for the last decile category LFPR was 36.2% overall.

WPR for overall and last decile category for Rajasthan were 32.3% & 36.8%. Similar pattern is found in relation to unemployment rate where among the top two decile groups it was more than the state average.

Hence with increased economic status, while there is higher LFPR and WPR, there is also greater unemployment rate as more labour is available for work to take up higher paying employment.

2.1.1 Gender factors lead to low female labour participation rates

Gender patterns reveal that LFPR in India was low among females with LFPR at 24.8% and male LFPR at 57.3%. A similar pattern can be seen across Rajasthan. Comparative LFPR between male and female in Rajasthan were 54.1% and 25.7%.

High differentials in male and female LFPR despite the increasing female education access only indicates the lower absorption of women into the economy.

LFPR of Youth (15-29) age group was much below that of whole working age group (15-59) indicating lower youth absorption in labour force for youth in Rajasthan at 43.2%. This was much below that for whole working age group, which for Rajasthan was 61.2%.

This trend indicates that there is a growing joblessness of youth with not enough jobs getting created for youth in proportion to availability of work.



Source: Image

2.1.2 Work participation rates of youth below the state average across all age groups

WPR of youth at both national and state level was below the national and state average. At national level, while the WPR for population 15 and above was 39.6%, for the 15-29 age group it was 36.8%. Similarly, the WPR for youth in Rajasthan was 37.6%. This was below the overall WPR of 57.4% for population 15 and above. This indicates lower absorption of youth taking place in employment.

2.1.3 WPRs are slightly higher for graduates and above than the state WPR

Educational progress brought slight improvements in WPRs. In Rajasthan while overall WPR was 57.4%, for graduates and post-graduates it was 63.5% and 64.6%. This indicates that higher education unlike anything below higher educational level has potential to absorb youth into better paying employment.

2.2 Employment by Sectors

2.2.1 Primary sector in rural areas and tertiary sector in urban areas were the dominant broader sectors of employment

In rural areas, the primary sector is the dominant sector of employment in Rajasthan with 64.2% dependent on it. In urban areas, the dominant sector of employment was tertiary sector in Rajasthan with 59.7% dependent on it. Hence income enhancement efforts should be focused on primary sector for rural areas and largely tertiary services in urban areas. Partial intersectoral shifts should be attempted from primary sector in rural areas and service sector in urban areas.

2.2.2 Agriculture in rural area and Trade and Manufacturing in urban area were the dominant sub-sectors of employment

While 65.48% were engaged in agriculture in rural areas, in urban areas the share of Wholesale and Retail Trade, Repair of Motorcycles and Motor vehicles was 22.08%, manufacturing 17.31% and construction 13.89%. Economic diversification beyond agriculture in rural areas was limited.



Source: Image

2.3 Status of Employment

2.3.1 Self-employment in rural areas and wage & salaried employment in urban areas was the dominant labour force participation pattern in Rajasthan

Both at the national level and in the state, self-employment in rural areas and wage and salary employment in urban areas was the dominant form of employment pattern. While about 54% were absorbed in self-employment in rural areas, about 43.2% were absorbed in wage / salary employment in urban areas.

Self-employment in rural areas of Rajasthan was 40.7%. In urban areas, wage and salary employment was in 40.0%. Higher self-employment in rural and urban areas is more forced and not opportunity self-employment emerging from desire for pursuing entrepreneurship. The lower share of salaried employment only indicates the level of informality.

2.3.2 In self-employment, a greater proportion of female are helpers and seen in invisible work both in rural and urban areas

In self-employment, both in rural and urban areas, there is a greater proportion of female engaged as helpers in own account enterprise. For Rajasthan it was 57.2%. This indicates that while most of the enterprise ownership is with male, the engagement of females has been more in form of helpers. This also means that female tend to be mostly unpaid workers assisting the family self-employment without adequate ownership over the same.



Source: Image

2.3.3 Informality pre-dominant in employment relations

At the national level, 62% wage / salaried employed did not have written contracts; 49.2% were not eligible for paid leave and 53.0% did not have any social security. Those without written contracts for Rajasthan were 81.9%, those without paid leave similarly 67.4%, those without social security 60.9% and with those none of these 54.9% for Rajasthan. The penetration of informal employment only indicates the quality of employment and thus suggests lacking aspects of decent work.

2.4 Wages

2.4.1 Wages lesser than stipulated minimum wages

The average wages received by the workers were more than the prescribed minimum wages. In Rajasthan, while the minimum wages suggested is Rs. 285 per day and Rs. 8,550 per month, the average wage was Rs. 377 and Rs. 11,657. More in case of urban male, the actual wages were comparatively higher than the minimum at Rs. 404 per day.

In case of urban male, monthly income were more than the suggested minimum wages which was Rs. 17,345. There are cases when there is less compliance with wage rates. Hence a need arises to ensure compliance with minimum wage standards in the informal sector both in rural and urban areas.

2.4.2 Gender differentials exist in Wages and income

There tends to be differences in wages across males and females in both rural and urban areas. Sometimes it tends to be 1.5 times higher in rural areas and twice high in urban areas. There is a need to reduce this gender differential of wages.

2.5 Unemployment



Source: Image

2.5.1 Unemployment rate increases with increases in educational levels

Among those educated secondary and above, female unemployment was 12.6% and male unemployment 8.1% which was higher than other educational levels. This indicates that with additional acquisition of education, unemployment too grows as the educated prefer to find jobs relevant to the aspirations.

In Rajasthan, 22.0% and 17.9% of graduates and postgraduates are unemployed. Hence the challenge of educated unemployment is a crisis that may need to be addressed.

2.5.2 Youth unemployment higher than the average across all age groups

At the national level, unemployment rate for youth was 15% in comparison to overall unemployment across all categories at 8.8%. Similarly, while the figures for overall unemployment in Rajasthan were 4.7%, in the case of youth it was 13.0%. This indicates the intensity of youth joblessness.

2.5.3 Vocational educational levels are very low

Penetration of vocational education indicates that its penetration was more among younger age group 15-29 which was 4.1% in comparison to 3.4% for 15-59 age group. Hence it indicates that there has been slight improvement in accessing vocational education by youth though not adequate.

2.5.4 Unemployment higher for rural females and urban males

Unemployment pattern showed that more females in rural areas and more males in urban areas were unemployed. Overall, while female unemployment is 5.0%, male unemployment is 4.7%. Unemployment is prevalent across both the gender and needs to be addressed.

2.5.5 Unemployment rate increases with more advantageous social position

Unemployment rate increases with more advantageous social position. Unemployment rates for different social categories were Scheduled Caste 2.4%, Scheduled Tribe 4.4%, Other backward castes 3.9% and others 4.9%. Higher unemployment among others seems to be due to higher preference for white colour jobs among but due to its lower availability.

Unemployment rate as per religion shows that for Hindus, Islam, Christians and Sikhs, they were 3.9%, 4.4%, 5.8% and 6.2% respectively. This shows that with increased minority status, unemployment rate increases.



Source: Image

3 State, Private sector and voluntary initiatives for employment

promotion

3.1 Initiatives by the state

The initiatives being taken by the state to promote employment can be broadly categorised into Skill development and training initiatives, Promotion of Entrepreneurship and Startups, expanding infrastructure development, encouraging formalization of the workforce and supporting rural development and agriculture. These have been taken up at both the central and state level.

Some of the national level initiatives include Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Apprenticeship promotion scheme (NAPS), Skill India Mission. Similarly at the state level, there have been initiatives such as Rajasthan Skill and Livelihoods Development Corporation (RSLDC) for skill building.



Source: Image

To strengthen startup, initiatives that have been started at national level include startup India, Atal India Mission (AIM), Make in India, Prime Minister's Employment Guarantee Program (PMEGP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI).

Government of Rajasthan has Rajasthan Startup Policy 2022 for nurturing start up and mentoring in the state. The two start up hubs promoted by the state are Techno hub and Istart Nest.

Promotion of roads, highways, road and rail networks, power generation are other means. Rajasthan State Roadways Transport Corporation (RSRTC) operates state owned bus services. Rajasthan Urban Development and Housing Board (RUDHB) develops urban infrastructure. Rajasthan Renewable Energy Corporation Limited (RRECL) promotes renewable energy. Efforts in the direction of formalisation of workers for greater social security is through the role played by Employees Provident Fund Organization (EPFO), General Insurance Corporation (GIC), National Social Security Schemes. Rajasthan State Social Security Board (RSSSB) is responsible for implementing various social security schemes for workers in the state.

Efforts in the direction of agriculture and rural development are through schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pradhan Mantri Krishi Sinchai Yojana (PMKSY).

In Rajasthan, there are schemes such as Rural Infrastructure Development Fund (RIDF) and Rajasthan Rajiv Gandhi Jal Sanchay Yojana (RGJSY) aiming at water conservation and water conservation.

National Rural Livelihood Mission (NRLM) at national level and State rural livelihood mission (SRLM) at state level have been into promoting self-help groups, building rural development institutions, financial inclusion and micro-enterprise development for addressing the challenge of livelihoods.

3.2 Private sector initiatives towards employment promotion

Private sector has adopted direct and indirect approach towards employment promotion. The direct efforts are through hiring individuals in the company. Start of production and service units creates employment opportunities.

Some of the large industries in Rajasthan are related to textiles & garments, cement and building materials, gems and jewellery, metals and mining and renewable energy.

Other initiatives are through providing skill trainings under industry networks such as that of Confederation of Indian Industry (CII) or through CSR foundations of Industries. Incubation and small business enterprise programs have also been offered.

3.3 Voluntary sector initiatives towards employment promotion

Some of the voluntary sector initiatives for employment promotion have been through Development of Agri and Agri allied sectors through CSOs such as Indian Grameen Services (IGS), PRADAN, BAIF, SEWA Mandir, Manjari Foundation, Barefoot college, GRAVIS etc. Many of the organizations such as Basix academy for building lifelong employability (B-ABLE), PRATHAM, Don Bosco Tech, ILFS, Tech Mahindra are offering skill training in a number of sectors.

Organizations such as BASIX, Ujjivan, Bandhan, AU Small Finance Bank in the past or currently provided microfinance services for enhancing self-employment of women.

Some of the voluntary sector initiatives for creating producer owned enterprises include Milk cooperatives in Ajmer, Udaipur; Rangasutra producer company, Urmul Masusthali Bunker Vikas Producer company Itd; Shilpkar producer company, Jodhpur handicrafts producer company and Bhilwara Handloom producer company Ltd.

3.3.1 Limitations of employment promotion programs

Despite the efforts made in employment promotion by state, private and voluntary sector, the challenge of unemployment continues. The limitations of the efforts are summarised below:

Type of efforts	Limitations from employment generation perspective
Skill development programs	Misalignment between Skills and Market needs; Skill programs not sufficient to meet industry standards; Lack of industry involvement in developing skill programs; more focus on supply driven and not demand driven skilling; Weak Industry-Academia collaboration; Inadequate infrastructure of Skill training institutes; Shortage of qualified trainers; Access and awareness barriers among marginal groups – women, rural youth, person with disabilities; Ineffective marketing and outreach; High turnover in placed employment; Employment placement in informal employment with low pay and low social security
Entrepreneurship and start up programs	High failure rates of startup; Limited access to capital for aspiring entrepreneur; Lack of business skills and experience; Inadequate supportive ecosystem for mentoring, incubating and accelerating; Focus on niche markets; Regulatory and compliance challenges; Limited market access;
Infrastructure development programs	Misalignment of infrastructure projects with employment needs; Lack of skill matching and training; Limited employment of local communities in infrastructure development projects; Ineffective employment linkages; short term nature of employment generated;
Formalisation of workforce	High level of informal employment; high challenges in formalising workforce despite potential benefits; social protection gaps; Low awareness on social security; Complex and burdensome regulatory framework; Inadequate functioning of social security / labour welfare boards; Low incentive to formalize among informal enterprises as it may lead to tax burden; Absence of institutions to link workforce with social security
Rural development and Agricultural programs	Misalignment of programs with employment needs; Limited focus on skill development; Inadequate consideration of market dynamics; Limited focus on pro poor value chain development; Infrastructure and Resource constraints; Limited access to technology such as value-added processing; weak infrastructure and logistics; fragmented and overlapping programs and challenges in achieving convergence; weak monitoring and evaluation of programs; exclusion of vulnerable groups such as Adivasis, landless labourers, women;
NRLM / SRLM	Limited scaling up and sustainability of the micro-enterprises; higher focus on financial services and limited focus on building production-marketing-livelihood skills of women; Weak market linkages; Limited capacities at local level; Limited cases of evolution into strongly established SHG federations; Limited cases of CBOs negotiating with government, private agencies and NGOs;
Initiatives by CSOs	Challenges in replicating successful models in different spatial-segmental-sectoral situations; Challenges in attracting state support for long term end to end support for creating, scaling and replicating successful models; CSR focus more towards immediately visible rather than long term beneficial for the community
Initiatives by Private sector	Focus on achieving profitability leading to investment in automation and hiring contractual labour works against employment generation goal; Employment generation for high-end technical and managerial jobs are formal whereas for unskilled and low skilled are informal;
Investments by SLBC and Industrial investments	Focus more on traditional handicrafts and tourism; Focus limited in employment potential sectors such as agriculture and manufacturing; Diversification of investment opportunities limited

While the above efforts are aimed at building the economy, which would also lead to employment creation, economic growth has not tended to translate automatically into job creation. As a result, there is a large segment of unemployed youth in Rajasthan. Given the above scenario, there is need for identification of unemployed youth, identify potential sectors with scope for job creation and plan investments for employment promotion in the times to come.

4 Policy Recommendations

4.1 Addressing employment challenges – an alternative strategy

The broader approach adopted for employment promotion is through ensuring intersectoral shifts in the economy. This means that those who were traditionally dependent on primary sector i.e., agri and agri allied sectors gradually shift to manufacturing and service sectors.

However, unlike the western and southeast Asian economies, India is witnessing a trend whereby the movement to manufacturing and service sector has been slow, though there has been a drastic change in the relative share of the sectors to GSDP in the economy.

While in economy, the share of manufacturing and service sector to GSDP has increased and that of primary sector reduced, this has not been the case when it comes to employment. As seen from the following table, while over half of the population is dependent on primary sector though it contributes just over one-fourth to the share of GSDP in the economy.



Source: Image

Sector	Employment Share % as per PLFS 2021-22
Agriculture, forestry and fishing	53.74%
Mining and Quarrying	0.89%
Manufacturing	8.41%
Electricity, gas steam, air condition supply	0.32%
Water supply, sewerage, waste management and remediation activities	0.31%
Construction	13.42%
Wholesale and Retail Trade, Repair of Motorcycles and Motor vehicles	8.40%
Transport and Storage;	3.12%
Accommodation and food service activities	1.11%
Information and Communication	0.62%
Financial and Insurance activities	0.76%
Real estate activities	0.07%
Professional scientific and technical activities	0.43%
Administrative and support service activities	0.98%
Public administration and defence, compulsory social security	1.09%
Education	2.68%
Human health and social work activities	1.36%
Arts, entertainment and recreation	0.12%
Other service activities	1.64%
Activities of households as employers, undifferentiated goods and services, produce activities for own use	0.72%
Activities of extra territorial organizations and bodies	

Table 1 - Employment Share by Sectors in Rajasthan

Efforts in the direction of radical shift from one to the other sectors comes with its challenges related to skill upgradation to new sector, technological adaptations towards newer sectors of the economy, quicker economic diversification which is beyond the current sectors employed in, need for large scale shifts from rural to urban, need to adopt to new lifestyles of work, breaking away from the current patterns of living, current state of marginalisation of Women, SC, ST, OBCs, Minorities which may take time to address.

Moreover, in the current sectors in the economy where people are already employed, they only draw low incomes. Ensuring wage enhancements within current economic activities and sectors already employed may trigger changes towards sectoral shifts in the long run. Intra-sectoral proficiency enhancement rather inter-sectoral shifting seems to provide with solutions in the shorter to medium run.

Based on the momentum that is built, intersectoral shifts can be ensured in the long run. The intersectoral shifts happen as there are changes in demand patterns in the economy.

4.2 Changing approach from Inter-sectoral shifting to intra-sectoral proficiency enhancement

When we speak of employment, we generally focus on two objectives:

(1) increasing the number of workers employed including self-employed to take care of

(a) net addition to the labour force, particularly the youth,

(b) those currently in labour force but unemployed and

(c) those who may want to move from not being in the labour force to joining it, particularly women, and

(2) improving wages or income in case of the self-employed, along with social security benefits like PF, ESI and pensions, and improved working conditions.



Source: Image

For objective (1) the generally suggested strategy is to increase economic growth, on the assumption that it will also generate more jobs. However, the experience of the last decade has been " jobless growth".

We have seen moderate GDP growth between 5 to 7% per annum but low (1-2% per annum) employment growth, that also mostly in the over-crowded agricultural sector and the lower end of jobs in the construction, manufacturing and services sectors. A lot of these jobs are in self-employment as a last resort. If we exclude workers in household enterprises who are unpaid, the growth is almost nil.

As a result there is very little growth in wages and self-employed incomes if one adjusts for inflation. One strategy to counter this has been to try to move people out of the farm work to non-farm sector jobs.

But as saw earlier, inter-sectoral shift is difficult due to the need for workers to move from rural to urban areas. They also must acquire new skills of working in new activities and living in strange places. Thus, a vast majority of workers who shift out of agriculture, remain in low paid, unskilled manual work on a casual employment basis, with no social security and poor working and living conditions.

We suggest an alternate strategy for both objectives (1) and (2) above. Instead of inter-sectoral shifting, policy should encourage Intra-sectoral proficiency enhancement. This means, for example, those in agriculture staying in it, but shifting from cereal crop cultivation to, for example, growing vegetables in the first step, and then growing vegetables off-peak season, using polyhouses, in the next step. This twostep climbing could double the farmers' income using the same amount of land and own labour.

Some tentative movements that could be seen in Intra-sectoral proficiency enhancement could be as below: -

-low end cultivation to higher value agriculture/ horticulture

- crop cultivation to dairy, poultry, fishery, etc.

- agricultural services from soil testing to sorting and packaging of raw produce like vegetables & fruits

- low end manufacturing to higher value items whether made in household enterprises or factories e.g. wooden and metal furniture)

- centralised or non-existent utilities (telecom, power, gas, water, sewage, solid waste, etc) to decentralized, service based enterprises (e.g. solar home systems).

- low-end proximate services to higher value proximate services (e.g. from roadside barbers to salons, or food bandis to sit down eateries)

- low end distant services to higher value distant services (e.g. data entry to application software design)

4.3 Intra-sectoral proficiency enhancement in various sub-sectors

4.3.1 Intra-sectoral proficiency enhancement in Agriculture

Let us see what these two steps do for an agricultural worker in the same village. She would get more days of work in vegetable cultivation and higher wages, due to the need for timely and more careful operations - sowing, planting, watering, weeding, spraying, and harvesting often in multiple lots.

Unlike in cereal cultivation, where operations have got mechanised, vegetables require manual workers. Polyhouse vegetable cultivation is even more skill and labour intensive.

Now let us see what happens in the third step of this intra-sectoral proficiency enhancement. Let's say there are many farmers in the village who started growing vegetables and they come together to form an FPO. To get a better price for their produce, they decide to set up a facility in the village for washing, drying, sorting, grading and packing the vegetables.

This not only improves the net income of farmers but generates more wage employment for agricultural workers in the village, within reach of their skill level and their place of stay.



Source: Image

Intra-sectoral proficiency enhancement in onion production in Alwar and Sikar districts can be achieved through adoption of improved practices such as drip irrigation, precision agriculture, disease resistant varieties. Value chain integration can be achieved with farmers going beyond farming to also include get into seed production, storage, processing and direct marketing. They can become part of the farmers cooperatives which allows farmers to pool resources, bargain collectively for better prices and access market opportunities.

They can upgrade their skills in financial literacy, technology and markets which helps them to remain competitive and navigate market. Onion based processed and value added products could be considered such a dehydrated onion flake, onion rings and French flies, pickled onions, onion paste, frozen chopped onions, onion chutney, onion flour, onion vinegar, onion oil and onion dyed textiles. Intra-sectoral proficiency enhancement in Wheat in Dausa district can be achieved by adopting improved practices such as precision agriculture, drip irrigation, disease resistant varieties. There could be diversification into value added products such as exploring options for wheatgrass production, bakey products or wheat flour.

Farmers can become part of the farmers producer organizations (FPOs) which allows them to pool resources, buy inputs at bulk for lower cost, bargain collectively for better prices and access shared storage facilities or processing units. They can upgrade their skills in financial literacy, technology and markets which helps them to remain competitive and navigate market.

4.3.2 Intra-sectoral proficiency enhancement in Handlooms / Handicrafts

Handloom weavers who produce items such as sarees, kurta churidar, with the artwork for festive occasions can also take up alternatives such as towels, curtains, bedsheets, blankets, tablecloths, dishcloths, cleaning cloths, handkerchiefs, wall hangings, cushion covers, handwoven bags, phone-cases, scarves and shawls. While the traditional produce can continue, the suggested produce are items of daily use with a large consumer base. The handloom weavers may only need to adopt their skills to produce items of daily use and not necessarily shift to a different sector.

This may help in expanding the market of produce by handloom weavers, reduce risk associated with market demand or market saturation, help in adopting to market trends and expand revenue streams, diversify produce range, utilize existing skills, ensure long term sustainability due to product diversification, explore new design and innovations.

Handloom sector may also alternatively adopt design softwares for creating innovative handloom designs, 3D and 4D technology in creating innovative designs that can be achieved with lesser time, use ecommerce platforms (amazon, meesho, craftsvilla) for marketing and reaching out to consumers.



Source: Image

Adoption of newer technologies may necessitate skill upgradation which can be taken up by the younger generation who are more exposed to digital technology. Such change agents can be created in the younger generation through exposing them to newer technologies that can be used in the handloom sector.

Handloom collectives (cooperatives or producer companies) may facilitate the adoption of newer technologies for creating new designs, newer production methods with upgraded machinery, branding, packaging, and digital marketing through online platforms.

Jaisalmer is a trade centre in embroidery work and mirror work items. Embroidery with attractive design motifs like tree, bird and animals are made on ghaghras.

For Intra-sectoral proficiency enhancement embroidery work may not be limited to ghaghras, dress material and sarees but could also be incorporated into items of home décor such as pouches, bags, tablecloths, curtains, bedsheets, blankets, pillowcases, wall hangings and photo albums.

Applique workers can elevate their craftsmanship by mastering intricate stitches, experimenting with new motifs and incorporating contemporary designs.

A unique brand could be built among customers which fosters trust and allows artisans to command higher prices. There could be direct selling through online forums and through participation in trade fairs.



Source: Image

4.3.3 Intra-sectoral proficiency enhancement in Food services

In case of traditional food services, the traditional offering of food such as samosa, Jilebi, chat, idly, dosa can be diversified to include a product range that can also cater to global taste (e.g., Korean, Italian, Lebanese cuisine), fusion taste (Hyderabadi pizza, Mexican dosa), healthier options (such as multi millet upma, multi millet idly, salads). This will help in creating a demand and liking for new taste among consumers, attract new consumers, expand the customer base, help stay ahead of the demand curve and boost revenue.

Good practices related to food hygiene can be introduced. This could be related to handwashing, handling food, cleaning utensils, using disinfectants for sanitization, storing food at appropriate temperatures, protecting from dust insect and contaminants, bins for proper waste disposal, well maintained hand washing station can improve the overall ambience thus attracting the customers.

For packaged foods, eco-friendly practices such as biodegradable packaging can be introduced. Food waste can be handled through composting the waste food, donating the surplus food.

Technological upgradation may involve linking with online food delivery services such as Swiggy and Zomato and delivering at doorstep. Digital payments such as through google pay, phone pe may be allowed.

Collectives of roadside food collectives can be explored, whereby the collectives are able to buy food raw material from vegetable or other markets at scale at a bargained price. This may bring down the cost of raw materials in their food outlets. Restaurants owned by food service owners' collectives can be set up at places with high traffic flow, highways, transportation hubs (such as bus stand, railway station, airport), tourist sightseeing locations, commercial locations (such as shopping locations).

These upgradations may help them remain within the sector, adopt skills and new practices according to customer requirements and achieve Intra-sectoral proficiency enhancement .



Source: Image

4.3.4 Intra-sectoral proficiency enhancement in construction sector



Source: Image

Construction workers come under the category of unskilled workers. However, with little skill diversification there is scope for enhancement of incomes. Specialized skills required at construction sites can be picked up going beyond their regular roles. The skills training could be acquired for roles such as that of General works supervisor, Highway works supervisor, land surveyor, storekeeper, electrical house wiring, plumbing and sanitation, formwork carpentry, building carpentry, masonry, bar bending, painting and decoration, welding, and architectural assistantship.

There could also be skill enhancement through training related to compactor operator, Backhoe loader operator, Transit and self-loading mixer operator, Junior mechanic hydraulic. There could also be specialized skills as that of construction safety health and safety technician. E

xposure to LEED (Leadership in energy and design) sustainable energy practices can benefit construction workers professionally as growing environmental consciousness may give rise to green building concept. Exposure to building information modelling (BIM) can help construction workers through visualizing their tasks enabled through digital simulation. It may help in understanding the potential hazards that may occur.

Skilled construction workers either individually or collectively can take up small businesses such as home renovation, modular kitchen works, bathroom remodelling, minor electrical or plumbing work, painting works, roofing and tiling. Services related to assembling furniture, building shelves, gardening, landscaping may also be taken up through a network of skilled personal relevant for homes.

Thus, as can been seen, Intra-sectoral proficiency enhancement offers opportunities where the workers are able to upgrade their skills within the sector, adopt to technologies within the sector, enhance income within existing sector, reduce stress that is associated with sectoral shift, reduces chances of moving from rural to urban, offer greater livelihood security etc. This gradually prepares them for sectoral shift in the long run.

5.1 One district, one product (ODOP) products for DISC strategy execution



Source: Image

ODOP program of the Government could be utilised for strengthening demand for products, infrastructure and input strengthening, skill building and capital enhancement. ODOP involves identification and formation of production clusters, focused efforts towards infrastructure development, capacity building and skill development, branding and marketing and financial support.

It helps in boosting local economies, preserving traditional skills and crafts, promoting brand recognition and improving export potential.

Under ODOP, the following products are identified and could be promoted in the state.

ODOP	Districts
Onion based Products	Alwar, Sikar
Rose based Products	Ajmer
Mango based Products	Banswara
Garlic based Products	Baran, Pratapgarh
Mustard based products	Bharatpur, Tonk
Pomegranate based Products	Barmer
Maize based products	Bhilwara
Moth (Bhujia, namkeen, papad snacks)	Bikaner

Table 2 - Products identified district-wise under the One District One Product Scheme

Rice based products	Bundi
Jaggery	Chittor
Groundnut Products	Churu
Wheat based products	Dausa, Hanumangarh
Potato Based Products	Dholpur
Mango based Products	Dungarpur
Kinnow based Products	Ganganagar
Isabgol	Jalore
Tomato based Products	Jaipur
Nutritive Xerophytic fruits (Kair Sangari)	Jaisalmer
Orange based Products	Jhalawar
Fruit based products (lemon)	Jhunjhunu
Cumin based products	Jodhpur
Sesamum based Products	Karauli
Coriander based Products	Kota
Fenugreek based Products	Nagaur
Milk based Products	Pali
Minor Forest Produce (Amla. Jamun, Custard Apple etc.)	Rajsamand, Udaipur
Guava based Products	Sawai Madhopur
Fennel based products	Sirohi
	•

(Source: Ministry of Food Processing)



5.2 District Export hubs as centers for reaching external markets

District export hubs could be sources from where exports could be facilitated. These hubs provide services such as market research and information, training and skill development, facilitating and networking. These hubs aim to provide opportunities for benefiting from export markets, attract investment in the district, handholding and support to exports, generating employment and enable in marketing through physical and digital means. Employment opportunities in following export zones could be considered.

District	Products
Ajmer	Bags, Spices, Garments, Marble and Agro Products
Alwar	Engineering Products
Banswara	Synthetic Yarn, Fabric, Marble Tiles
Baran	Soyabean and other Agro Products
Barmer	Isabgol, Gaur Gum
Bharatpur	Agro Products and Services Exports
Bhilwara	Textile and Denim
Bikaner	Wool, Food Product, Cremics, Bikaneri Bhujia
Bundi	Rice
Chittorgarh	Marble, Granite and Tourism
Churu	Guar Gum, Wood products
Dausa	Stone articles and Durry
Dholpur	Skimmed Milk Powder, Stone Tiles and Slab
Dungarpur	Green Marble Slabs and Tiles
Hanumangarh	Agro Products(Rice & Cotton), Tourism

Table 3 – Products identified district-wise for exports

District	Products
Jaipur	Gems & Jewellery, Garments, Furniture, Services Exportsand others, Toys, Blue Pottery of Jaipur
Jaisalmer	Applique Work, Marbel& Services, Isabgol, Gaur Gum, Handicraft and Services Exports
Jalore	Spices, Granite and Dairy Products
Jhalawar	Sandstone, Assorted Items
Jhunjhunu	Wooden and Stone based items
Jodhpur	Isabgol, Gaur Gum, Furniture Products, Powder,Handicrafts, Stainless Steel Sheets/Utensils
Karauli	Sandstone article, Silica and Powder
Kota	Chemical & Fertilizers, Minerals, Kota Doria
Nagaur	Isabgol, Spice Processing, Handtools and Woolen Carpet,Makrana Marble
Pali	Cement, Mehandi, Guar Gum
Pratapgarh	Thewa Arts, Tourism
Rajsamand	Tera Kota, Marble Decorative article
Sikar	Antique Furniture
Sirohi	Stone carving, Tiles, Psyllium Husk
Sri Ganganagar	Gum Powder
Sawai Madhopur	Tourism
Tonk	Stone Tiles and Sandstone Tiles
Udaipur	Marble, Mineral & Services Export

(Source: Directorate General of Foreign Trade)



5.3 DISC approach for Employment promotion Investments

DISC approach is needed for making capital investment planning for employment promotion. The components are described below: -

D for **Demand** - for the new product (vegetables) or service (sorting of vegetables). Fortunately, due to rising per capita incomes in the upper quartile of the country, there is rising demand for such products/services.

Demand needs to assess across categories of socio-economic segments, customer types, geographies and future trends in demand

I for inputs and infrastructure- In the current example, farmers cannot shift to vegetable cultivation unless right quality seeds and agro chemicals are available. Later polyhouses, and still later vegetable packaging crates are needed. Irrigation and road infrastructure is needed.

Similarly, in handloom / handicrafts to produce new products for the market the existing machinery may not work, and hence new handloom machineries may also need to be integrated.

S for skills - a cereal growing farmer does not automatically know how to grow vegetables, even less so in a polyhouse. Similarly, women who know paddy transplanting or weeding don't automatically know the steps in vegetable cultivation. These skills must be imparted and learned. Similarly, the handloom / handicraft workers who produced goods such as sarees, kurta churidars need to learn to produce goods such as towels, blankets etc.

C for Capital - Intra-sectoral climb needs capital - for new equipment, machinery, processing facilities and more working capital. In the example we are discussing, vegetable cultivation needs more money to buy seeds and agrochemicals. The next step needs capital to install a polyhouse. The third step needs investment in vegetable sorting and grading facility. All stages need capital for investing in skill upgradation.



Measures for demand enhancement

Some of the measures that can be adopted for demand creation are conducting market initiatives such as trade fairs, Innovation grants to promote innovations in products, providing GI tags for specific commodities for quality assurance, promoting e-commerce platforms and mobile apps for market products, setting up export facilitation centres and where needed, imposing tariffs on artificially cheap imports.

Measures for Inputs and infrastructure

Some of the inputs and infrastructure that can be created for strengthening inputs and infrastructure in Agriculture in the state include setting up high quality seed banks, soil testing vans, polyhouse subsidies, irrigation infrastructure; in horticulture there could be setting up of storages and cold chain facilities, in handlooms it could be design innovation centres, machinery modernization programs, expanding raw material access and skill development centres, e-commerce and mobile based platforms for reaching consumers.

Measures for Skill development

Skill development needs to be strengthened in identified sectors in Rajasthan. Currently skill development is being done through State skill development program. In agriculture, there could be trainings related to precision farming, organic farming, use of advanced technology for agriculture. There need to be skill trainings in post-harvest technologies, seed development, processing and value-added technologies.

In Handloom, there could be trainings on new handloom technologies, courses on design development and innovation etc., In food processing, there could be skill trainings which can be offered by such as NGOs etc.



Source: Image

5.3.1 Micro-Franchise Model for DISC strategy execution

In private sector, micro-franchisees could be promoted with support of small corporates. Micro-franchise model can be adopted for established chain of brands. For example, in tea brands, it could be MBA Chaiwala, Tea world, Tea trance, Chaiduniya etc. Similarly, there could be franchises for Biryani such as Paradise Biryani, Bawarchi etc.

Similarly there could be chaat franchisees such as Chaatkachaska, Agrawala, Gokul etc. In food and services sector, micro franchisees could include Rajasthan's Royal Rasoi, Chai chakra, Fruity folks, Mitha Meetha, Snack attack. In services sector, it could include Gadget guru, freshen up laundry, Shoeshined, Rajasthan repair, Helping hands.

In retail, it could be Nature's Niche, Trendy Threads and Pocket Boutique. Under franchise, an individual or group of youth can run an enterprise. Some of the benefits of micro-franchisees are that it requires a smaller investment than traditional franchisees.

The chances of getting consumers are faster as the brand is already established. There is operational simplicity as it is standardized, flexibility and assures quicker returns on investment. Micro-franchisees get DISC support from small corporates.



5.3.2 Attention on marginal social segments, rural/small town locations and unskilled or semiskilled workers

In a socially and economically unequal society, the benefits of DISC approach may not penetrate equally across all socio-economic segments. Skill and capital access becomes much more challenging for social segments such as scheduled castes (SC), scheduled tribes, (ST), de-notified tribes (DNTs), other backward classes (OBCs), Minorities, Women, Youth and Disabled.

There may be a need for more specialised approaches to reach out to these segments. Similarly, attention to skill and capital access need to be based on locations with focus on rural areas and small towns upto district headquarters. Similarly, focus has to be on skilling the unskilled and semi-skilled and capital access to the skilled who are willing to set up their own enterprises.

Through careful policy interventions spanning DISC for various subsectors, we can ensure a lot more employment and wages/income in existing subsectors. This will then reduce pressure to shift workers across sectors, which can then happen at its natural pace.

5.3.3 Targeted investment towards employment promotion and wage enhancement

There is a need for targeted investments towards employment promotion and wage enhancement. As can be seen from analysis of unemployment numbers and investments for wage enhancement, about Rs. 3,40,792 crores need to be invested each year.

Financial resources could be mobilized from Banking sector which could be 50% of the SLBC funds allocated for farm and non-farm sector under priority sector lending, 15% of the capital expenditure of the state budget, 25% of the overall capital required from private sector and 10% from household contribution of the beneficiaries.



6 Sectoral challenges in Rajasthan and suggestions for addressing

these

6.1 Agriculture

In the state 62% small and marginal farmers hold 18.6% of the total area. Average land size is 2.73 hectares. A large segment of the population is dependent on agriculture and allied activities for its livelihood. The major area is under food crops. The important cereal crops are wheat and bajra and pulses are Gram. Rape & Mustard are major oil seeds. The productivity of cereals is 20.99 quintals per hectare, pulses 6.28 quintals, oil seeds 14.88 quintals, sugarcane 758.45 quintals and cotton 558 lints.



Source: Image

Crops	Area in Lakh Hectares (2022–23)	Production in Lakh Tonnes (2022-23)
(A) Cereals	97.54	206.57
Kharif	63.61	77.84
Rabi	33.93	128.73
Wheat	30.00	110.40
Jowar	5.6	5.9
Bajra	43.2	45.3
Maize	10.0	22.7

Table 4: Crop wise, Season wise production trends in Rajasthan

Crops	Area in Lakh Hectares (2022-23)	Production in Lakh Tonnes (2022-23)	
(B) Pulses			
Kharif	36.16	20.14	
Rabi	20.98	27.28	
Gram	21.1	23.2	
(A+B) Food Grains	154.68	253.99	
Kharif	99.77	97.98	
Rabi	54.91	156.01	
© Oil Seeds	63.77	99.78	
Kharif	24.21	33.64	
Rabi	39.56	66.14	
Rape & Mustard	27.2	45.1	
Groundnut 8.6		19.3	
(C) Sugarcane	0.04	2.18	
€ Lint	7.77	25.53	

Some of the challenges related to agriculture in Rajasthan are low rainfall and water availability, heavy dependence on irrigation, soil erosion and degradation, monoculture and low crop diversification, inadequate access to technology and information, restricted access to loans and agricultural inputs, low productivity.

Adopting efficient water management, climate-resilient practices, soil conservation measures, access to credit and inputs, skill development can address some of these issues. Given the low rainfall in the area, there is scope for Intra-sectoral proficiency enhancement through diversification into millets given the fact that it is considered superfood and has potential to enter into health and wellness market. Cactus often considered a nuisance and found in Rajasthan can be cultivated to tap into vegan leather trend and utilised for making cactus leather-based bags, wallets and shoes.

Crop diversification into high value crops based on demand projections can be undertaken. Efforts need to be made to increase productivity.

Custom hiring centres can be established so that farmers can benefit on use of tool and technologies from the pooled resources.

Agri business and Agri clinics can be strengthened. Drip / Sprinkler irrigation and techniques of protected agriculture for horticultural crops need to be disseminated on a large scale. There can be establishment of hi-tech nursery units in every district for crops like fruits, vegetables, flowers etc.

6.2 Horticulture

About 78,137 hectares of cultivable area is under fruit production, 2,04,005 hectares under vegetable production and 8,11,797 hectares under spices production. Production of fruits is 9,56,442 metric tonnes, vegetables 23,74,806 metric tonnes and spices 10,44,880 metric tonnes.

The state is the largest producer of seed spices like Fenugreek, Coriander, Cumin, Fennel etc with third position in total production of spices and fourth in Kinnow production in India.

State also leads in Mehandi and Isabgol production. Mango, Aonla, Pomegranate, Gauva, Orange, Ber and Malta are the other horticulture crops grown.



Source: Image

Fruits			Vegetables		Spices				
Year	Area in Hectare	Production in Metric Tonnes	Productivity in Kg per hectare	Area in Hectare	Production in Metric Tonnes	Productivity in Kg per hectare	Area in Hectare	Production in Metric Tonnes	Productivity in Kg per hectare
2021-22	78,137	9,56,442	12,241	2,04,005	23,74,806	11,641	8,11,797	10,44,880	1,287

Table 5: Production of Horticulture crops in Rajasthan

The challenges related to horticulture in Rajasthan are dependence on limited groundwater available due to low rainfall, soil degradation, lack of cold storage, limited market access and dependence on middlemen, lack of access to training and education, extreme weather events and price fluctuations and market dynamics.



Source: Image

Some examples of Intra-sectoral proficiency enhancement in Rajasthan are related to diversification into rose cultivation and extraction of rose oil in Bundi, mushroom cultivation in homes and apartments in Jaipur and cultivation of cactus to create leather alternatives. Similar diversification opportunities can be further explored.

Offseason and exotic vegetables – asparagus, celery, capsicum (green and coloured), cherry, tomato, cucumber; flower / ornamental crops for domestic and export markets can be explored. There could be production of crops for processing industry needs e.g. gherkins, potato, fruits and select vegetable for processing, flowers (for extracts), medicinal and aromatic plants.

Some of the steps that can be taken up for strengthening infrastructure are setting up of cold chain facilities, Horti-processing centres which can be taken up by farmer entrepreneurs, strengthening of Agri business and Agri clinics, promotion of water saving techniques such as micro (drip / sprinker) irrigation, organizing Buyer Seller meets for better price discovery, there could be promotion of protected cultivation. Hi-tech nursery units may be set up for fruit crops, vegetables, flowers etc.

6.3 Animal Husbandry



Source: Image

In Rajasthan, animal husbandry is not merely a subsidiary to agriculture, but it is a major economic activity, especially in arid and semi-arid areas, thus providing the much-needed insurance against frequently occurring scarcity conditions.

Animal husbandry enhances the economic viability and sustainability of farming systems particularly in rain fed areas. In arid western region, livestock farming essentially works as an insulating factor against vagaries of drought and famines and provides a kind of stability and sustainable livelihood to the rural poor.

The State of Rajasthan is rich in livestock wealth. Rajasthan is also blessed with the best breeds of cattle, sheep and camels of the country. The State is endowed with the finest drought tolerant milch breeds (Rathi, Gir, Sahiwal and Tharparkar), dual purpose breeds (Kankrej and Haryana) and the famous draft breeds of Nagori and Malvi.

The livestock Census-2019 has placed total livestock population of the State at 568.01 lakh and poultry birds at 146.23 lakh.

The livestock population in the state includes 1,735 thousand cross bred cattle, 11,589 cross bred cattle, 12,976 thousand buffaloes, 91 thousand cross bred sheep, 8,989 thousand indigenous sheep, 21,666 thousand goats, 21 thousand cross bred pigs, 217 thousand indigenous pigs and 445 thousand camel & other livestock. The poultry population was 8,024 thousand.

The following table provides details of production from livestock.

Year	Milk Production (Thousand Tonnes)	ousand (Thousand		Wool Production (Lakh Kg)
2021-22	33,265	221	2,688	156

Table 6: Production of Milk, Meat, Eggs and Wool in Rajasthan

Some of the challenges related to dairy sector in Rajasthan are related to fodder scarcity, disease outbreaks, low milk productivity, inadequate veterinary services, price volatility, limited processing and value addition. In Poultry, challenges are related to high feed costs and high mortality rates. There is lack of direct access to markets resulting in dependence on middlemen. There is lack of processing and value addition.

Intra-sectoral proficiency enhancement is possible through diversification into dairy based products such as cheese, yogurt, paneer, ice cream, butter and ghee. In poultry, there can be diversification to frozen poultry, marinated pieces. Online platforms can be utilised for direct access to consumers. There is growing demand for camel milk and camel milk-based products as it is considered good for certain health conditions. The same can be explored for intersectoral climbing.

In Dairy, small dairy units can be set up through indigenous breeds. Low investment Backyard poultry units can be encouraged. Awareness on scientific poultry management, construction of broiler sheds, creating processing facilities in poultry, strengthening of veterinary services can be undertaken. For promoting sheep rearing and Goatery, there is a need to encourage development of pastures and grazing land.



Source: Image

6.4 Fisheries

The state has many water bodies which offer potential for capture and culture fisheries. Total water resources available in the state is 15,838 covering an area of 4,23,765 hectares which includes rivers and canals, waterlogged area. There are 4 major rivers, 6 major lakes, 45 completed dams, reservoirs and farm ponds which offer scope for fisheries. The state has made progress in inland fisheries. Fish production was 65,694 MT in 2021-22. There are 30 government hatcheries / seed farms in the state. Most of the farms are non-functional. About 958.31 million dry fish seeds were stocked during 2022-23.

Some of the challenges related to fisheries sector are related to encroachment of aquatic ecosystems, adoption of unsustainable fishing practices, lack of access to extension, limited cold storage, dependence on middlemen and price fluctuations. Intra-sectoral proficiency enhancement can take place through adopting aquaculture, cage culture or ornamental fish farming. Value added products like fish pickles, dry fish can be explored.

6.5 Forestry

The state has 3 national parks, 27 wildlife sanctuaries and 15 conservation reserves. There are also four biological parks. These offer opportunities for ecotourism-based livelihoods. Agro forestry has been practiced as a traditional farming system which is helpful in expanding the tree coverage on farmer fields along with locally grown crops. As part of 'Ghar ghat aushadhi yojana' Tulsi, Giloy, Ashwaganda and Kalmegh is being raised in nurseries and distributed to families.

Some of the challenges related to NTFPs in Rajasthan are unsustainable harvesting practices, low prices and exploitation by middlemen, lack of access to skills and technology, low diversification into processed products. Some of the Intra-sectoral proficiency enhancement activities that can be taken up are developing value added products such as herbal teas, medical concoctions; skill training for taking up value added products. Online and ecommerce platforms can be used for accessing markets.



Source: Image

6.6 Industry

The industry sector comprises of mining & electricity, quarrying, manufacturing, qas, water supply & other utility services and construction. Within the industrial sector, the of manufacturing share was 41.26%, construction 32.76%, electricity gas and water supply 13.38% and mining & quarrying 12.60%. 8,24,158 industrial units/entrepreneurs Udyam registration has been registered upto December 2022 on the Udyam Registration Portal. Employment has been made available to 48,42,788 persons in these units. The main industry in the state is mineral based, agriculturally based and textile based.



Source: Image

Some of the challenges related to manufacturing in the state are related to inadequate roads, power and water shortages, skill gap and labour shortage, limited access to capital and financing. Upgradation of skills through skilling, reskilling and upskilling can result in Intra-sectoral proficiency enhancement.

For textile sector, there could be skills training related to weaving, dyeing, finishing and quality control. In Gems and Jewellery, it could be related to cutting, polishing and setting stones. In construction, training could be as masons, carpenters, electricians and plumbers.

6.7 Services

The state is a major tourism hub in the country. The major constituents of service sector in Rajasthan are Tourism, Trade, hotels and restaurants, Real estate services, financial sector, public administration & other services. The sectoral share of trade, hotels and restaurants within service sector is 27.69%, real estate 24.62%, financial sector 16.40% and public administration 11.03%. Other important segments are education, healthcare, Transportation & logistics and IT and communication services.

Some of the challenges related to service sector in Rajasthan are related to infrastructure bottlenecks, skill gap and human resource issues, dependence on seasonal tourism, informalization of workforce, social and cultural barriers related to low female labour participation. Upgradation of skills through skilling, reskilling and upskilling and formalization of enterprises can result in Intra-sectoral proficiency enhancement.

In service sector, skills training could be related to tour planning, tour and travel operations, heritage tourism. In hotel sector, it could be related to housekeeping and front desk operations, event management in restaurants. Healthcare can provide opportunities as medical lab technicians, Physiotherapy assistants, Yoga instructors. In retail sector, it could be for supervisory positions in fashion boutiques, e-commerce customer support and real estate sales.

7 Investments needed to address unemployment and wage

enhancement

7.1 Investment needed

Estimated unemployed population in Rajasthan is 15,88,141. There would be an addition of 4,45,449 each year to the labour force at the current population growth and workforce addition rates. Considering the current unemployed and the average workers getting added each year, about 7,63,077 need to be provided with employment each year. To create employment and make person fully employable, it requires an investment of Rs 20,05,197. About Rs. 7,65,060 crores investment needs to be made, which is about Rs. 1,53,012 crores each year. The various sources of investment per year could be Banking finance Rs. 76,056 crores; State government Rs. 22,952 crores; Household investment Rs. 15,301 crores and Private sector investment Rs. 38,253 crores.

Income generation of Unemployed	Number / Percentage	Investments (in Rs.)
Rajasthan population @ 2011	6,86,21,012	
Population – 2023	7,95,02,477	
Growth rate per annum between 2011-2023	1.23%	
Population (all ages) LFPR as per PLFS 2022-23	45.4%	
Labour force in 2022-23	3,60,94,125	
WPR as per PLFS 2022-23 for all age groups	43.4%	
Working population in numbers in 2022-23	3,45,04,075	
Unemployment rate	4.4%	
Unemployment @ 4.4% across all age categories	15,88,141	
Increase in labour force per annum	4,45,449	
Number to be employed per year if increase in labour force plus unemployment	7,63,077	
Average investment needed for five years (in Rs.)		20,05,197
Investment required in Rs. Crores (for five years)		7,65,060
Investment in Rs. Crores (required for one year)		1,53,012
Credit to be mobilised from Banks for farm and non-farm sector (in Rs. Crores)		76,506
Capital expenditure available with State Government (in Rs. Crores) @ 15%		22,952
Household Investment @ 10% total investment (in Rs. Crores)		15,301
Private sector investment @ 25% of total investment (in Rs. Crores)		38,253
Average investment (in Rs. Crores)		1,53,012

Table 7: Investments needed for new employment generation 2024-29

Similarly, there would also be need for investments towards wage and income enhancement. About 80% of the workforce in Rajasthan are estimated to be in unorganized who receive low incomes for their services. An investment of Rs 1,87,780 crore would be required per annum. It is assumed that Rs. 3,19,515 would be required for enhancement of one wage income earner, with varied patterns for casual labour 6,17,315, self-employed 3,48,016 and wage / salaried employed 2,61,912. Households could contribute 10%, Government 15%, Private sector 25% and Banks 50%. About 2,93,85,056 workers could be targeted who constitute nearly 80% of the workforce in the unorganized sector.

Wage enhancement of Low-income earners	Number / Percentage	Investments (in Rs.)
Rajasthan population @ 2011	6,86,21,012	
Population – 2023	7,95,02,477	
Growth rate per annum between 2011-2023	1.23%	
Population (all ages) LFPR as per PLFS 2022-23	45.4%	
Labour force in 2022-23	3,60,94,125	
WPR as per PLFS 2022-23 for all age groups	43.4%	
Working population in numbers in 2022–23	3,45,04,075	
Increase in labour force per annum	4,45,449	
Number to be enhanced with wages @ 80% of the workforce plus additions to workforce each year	2,93,85,056	
Average investment needed for five years at ICOR at 2 with varied patterns for casual labour, self-employed and wage / salaried employed		3,19,515
Investment required in Rs. Crores (for five years)		9,38,898
Investment in Rs. Crores (required for one year)		1,87,780
Credit to be mobilised from Banks for farm and non-farm sector		93,890
Capital expenditure available with State Government (in Rs. Crores) @ 15%		28,167
Household Investment @ 10% total investment		18,778
Private sector investment @ 25% of total investment		46,945
Average investment (in Rs. Crores)		1,87,780

Table 8: Investments needed for wage enhancement 202	4-29
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Hence the annual investments that would be required for job creation and wage enhancement across sectors would be Rs. 3,40,792 crores.



7.2 Sources of Investment

Investments towards Emplo Promotion	yment	Investments toward Wage enha	Total Investments	
Employment to be generated per annum	38,15,386	Number of workers to be enhanced with wages @ 80% of the workforce	2,93,85,046	
Employment to be generated per annum	7,63,077	plus additions to workforce each year	2,93,63,040	
Average investment needed for five years (per unemployed)	20,05,197	Average investment needed per year for low wage earner with varied patterns for casual labour, self- employed and wage employed	3,19,515	
Investment in Rs. Crores (for five years)	7,65,060	Investment in Rs. Crores (for five years)	9,38,898	
Investments Rs. Crores (for one year)	1,53,012	Investment Rs. Crores (for one year)	1,87,780	3,40,792
Total Credit by Banks for farm and non-farm activities	76,506	Total Credit by Banks for farm and non-farm activities	93,980	1,70,486
Capital expenditure by Government for unemployed	22,952	Capital expenditure by Government for low wage employed	28,167	51,119
Household investment @ 10% of total investment	15,301	Household investment @ 10% of total investment	18,778	34,079
Private sector investment @ 25% of total investment	38,253	Private sector investment @ 25% of total investment	49,945	88,198
Average investment (in Rs. Crores) 1,53,01		Average investment (in Rs. Crores)	1,87,780	3,40,792

Table 9 – Total investments needed 2024-29



8 Conclusion

It can be said that challenges of unemployment among rural and urban youth including young women in Rajasthan need an integrated approach. From the classical approach that focuses on inter-sectoral shifting, there is a need to try an alternative strategy of Intra-sectoral proficiency enhancement.

Initially demand estimations need to be undertaken based on market availability for produce and services. Infrastructure needs to be strengthened as per requirements for each sector. Skills need to be enhanced to develop market-oriented skills. Capital needs to be mobilised and invested for employment creation.

About Rs Three lakh forty thousand seven ninety two thousand crores is required each year over the next five years to absorb the unemployed population and enhance the wage income of many times that number. This level of investment is highly feasible as it is in the range of 30% of the GSDP. With targeted investments unemployment gap and wage enhancement gaps can be reduced in the coming years. With targeted investments unemployment gap and wage enhancement gaps can be reduced in the coming years.

