



# Fundamentals of Targeted Integrative Program Development for Rural Labor Market Growth in Surplus Regions

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## ABSTRACT

This article introduces a systematic approach for developing a targeted comprehensive program aimed at enhancing the rural labor market (TCPDRLM) in labor-surplus regions of the Republic of Uzbekistan, within a socially oriented market economy. The paper outlines key interconnected principles for the development of TCPDRLM, including target orientation, complexity, integration, specificity, variability, realism, optimality, priority, delineation of powers and functions, limitations, targeting, controllability, and interconnectedness. Based on these principles, the article proposes interrelated sections for the program's development, covering analytical and problematic aspects, target delineation, scientific and methodological frameworks, information management, modeling, software development, resource allocation, organizational and economic structuring, summary formulation, and legal considerations. Additionally, the article details the primary stages of TCPDRLM development, including setting objectives for the rural labor market (RLM), developing methodological and modeling frameworks for RLM analysis and forecasting, collecting statistical, marketing, and sociological data, compiling the TCPDRLM subprograms, obtaining approval for the RLM development program, and establishing organizational, economic, and legal mechanisms for program implementation and adjustment. The article's scientific contribution lies in the formulated methodology for TCPDRLM development in the rural labor market.

**Keywords:** Rural Labor Market, Program Principles, Information Support, Model Support, Software, Financial Resources

**JEL Classifications:** J01, J08

## 1. INTRODUCTION

A targeted comprehensive program (TCPDRLM) is an effective tool for substantiating the main measures for developing the rural labor market in labor-surplus regions within a socially oriented market economy. This approach has been relatively underexplored in the methodological aspect (Chernyaga, 2016; Stat.uz, 2022). Most existing studies focus on regulating the financial and economic systems at the national and regional levels (Ehrenberg and Smith, 1996; Ivanov, 2014; Junankar, 1981). However, the specific issues related to the labor market's programmatic measures, unemployment, and labor supply-demand ratios in rural areas-where over 64.5% of the unemployed able-bodied population and at least 15% of the unemployed in labor-surplus regions of Central Asia reside-are inadequately addressed (Kholmuminov, 2021; 2022).

In this context, we propose a methodology for constructing the TCPDRLM. This methodology aids in formulating both short- and long-term strategies to address imbalances between labor demand and supply across agricultural production sectors. It also aims to meet the increasing need for human capital and employment opportunities in industrial processing, services, and individual labor sectors (Minford, 1983; Kholmuminov et al., 2020; Ageeli, 2023). The objectives include achieving a balanced ratio between labor demand and supply, optimizing employment structures, fostering a proficient national workforce, enhancing the efficacy of employment service infrastructure, ensuring robust social protections for the unemployed, and instituting organizational, economic, and legal frameworks to regulate labor market dynamics. These efforts are directed at improving the economic well-being of the populace (Oswald, 1985; Molchanova, 2015).

This program is intricately aligned with the overarching state employment policy and adheres to macroeconomic principles concerning the relationship between employment levels, investment endeavors, job availability, and labor pool dynamics (Kholmuminov, 1996).

## 2. MATERIALS AND METHODS

The primary objective of this article is to refine the methodology of the Central Committee for the Development of the Republic of Uzbekistan in labor-surplus regions, aiming to develop both short- and long-term strategies for rational employment and minimizing unemployment. This study focuses on creating organizational and economic frameworks for effectively implementing such programs.

Local scholars, including Tursunov (2022) and Kholmuminov et al. (2021), have explored the dynamics of industrial production in textile enterprises concerning financial stability and business processes in the digital era. Yuldashev et al. (2020) have extensively studied agricultural issues in Uzbekistan, while Sharipov et al. (2021) have contributed research on human capital.

A pivotal tool for regulating and predicting the development of the rural labor market (RLM) is the targeted comprehensive program, particularly amid the evolving market relations in rural labor recruitment (Balbaa, 2024). This program enables state and local authorities to influence the RLM using market-driven methods to regulate socio-economic processes (Pospelov and Irikov, 2016). It includes both short- and long-term measures supported by financial, organizational, and other resources, aiming to ensure the optimal use of labor resources and maintain acceptable levels of unemployment while providing social protection measures.

The formulation of the targeted comprehensive program for the development of the rural labor market (TCPDRLM) is guided by several fundamental principles:

- **Target orientation:** Establishing the goals of state employment policy in rural regions as a precursor to directing the activities of the central committee for labor and social development.
- **Complexity:** Addressing all issues associated with RLM development in the region.
- **Conjugation:** Integrating measures to regulate rural labor market development with broader economic, social, and demographic policies in the region.
- **Specificity:** Considering the unique socio-economic, organizational, and legal conditions in the region influencing RLM development.
- **Multivariate:** Maintaining flexibility to adjust or substitute measures in response to changes in the RLM.
- **Reality:** Ensuring that planned measures are feasible with available or obtainable resources.
- **Optimality:** Utilizing optimization calculations derived from economic and mathematical models, along with statistical, marketing, and sociological information, to determine the most effective strategic measures for RLM development.
- **Priority:** Ranking TCPDRLM activities based on urgency within the constraints of limited financial resources.

- **Clear delineation of responsibilities:** Clearly defining responsibilities among various entities involved in rural human resource management.
- **Establishment of a permissible natural level of rural unemployment.**
- **Targeting:** Allocating TCPDRLM measures and corresponding resources according to responsible implementing entities.
- **Manageability:** Establishing a specialized management system for developing and implementing TCPDRLM.
- **Interconnectedness:** Ensuring cohesion across all sections and activities of the program.

The program includes interconnected sections: Analytical, target-setting, scientific, methodological, informational, modeling, computational, software, resource allocation, organizational, economic, summary, and legal aspects.

The first section comprises two subsections: Analytical and problematic. The analytical subsection characterizes the current situation of the RLM, including factors influencing labor demand and supply dynamics, employment distribution, and economic, social, and demographic development in rural regions (Shadiey, 1999). Key aspects affecting RLM include employment levels, workforce distribution across agricultural production, industrial processing, services, and individual labor sectors, and financial status indicators like enterprise revenues, organizational finances, and worker wages (Rudneva, 2016; Astanakulov et al., 2024).

The problematic subsection addresses the primary issues in formulating strategies for RLM advancement, such as balancing labor demand and supply, optimizing workforce deployment, and improving vocational and proficiency standards of the unemployed workforce.

The target section of the program is based on the “tree of goals” for RLM development, including improving the material well-being of the rural population, forming rational employment structures, ensuring a balanced labor demand-supply ratio, reducing labor force demand in agricultural production sectors, providing jobs in industrial processing and services, and ensuring effective operation of organizational, economic, and legal mechanisms for regulating market relations.

The methodological support section begins with establishing a robust scientific and practical framework for policy formulation and execution related to RLM development. It incorporates principles and methodologies concerning market evolution, employment policy directions, regulatory priorities in labor supply and demand, contingency measures for changing socio-economic conditions, and factors influencing RLM subsystems.

The information support section is crucial, collecting data through existing and proposed statistical reporting forms, special sociological, and marketing research. This improves the information base, enabling identification of employed and unemployed populations, job vacancies, labor demand and supply, training and retraining status, and financial data related to employment promotion funds.

Marketing research is vital for evaluating labor supply and demand dynamics. The HR marketing department within employment promotion centers conducts research following a prescribed methodology, involving goal identification, issue definition, data collection and analysis, and strategic planning for marketing activities.

The sociological research methodology enhances data integrity, guiding priority actions to improve socio-economic relations between employees and employers. This involves ensuring timely remuneration, offering desirable job positions, fostering trust, proper contract drafting, matching workers with suitable roles, providing necessary resources, facilitating skill enhancement opportunities, and mitigating unemployment through various initiatives.

The model support section includes a set of developed models, applied packages (TSP, LP/88, RUS), proposed programs (RINOC-T), information digital technologies, and other tools used to determine optimal RLM development parameters.

$$F = a_1B + a_2O + a_3E + a_4A + a_5P + a_6NJ + a_7U + a_8M + a_9T + a_{10}AP + a_{11}I + a_{12}OM \quad (1)$$

where  $a_n$  are correction factors ( $n = 1..12$ ).

Financial resources (FR) for the central committee for the development of labor and social development in the region are sourced from various channels, including the employment fund

(EF), regional and rural budgets (BR), supplementary allocations from higher-level budgets (RB), contributions from the state employment fund (SEF), extrabudgetary revenues (EB), enterprise funds (FE), foreign investors, internal financial operations (CA), loans and credits (LC), and donations (DO).

The entire volume of financial resources at the regional level is determined by:

$$FR = EF + BR + RB + SEF + EB + FE + CA + LC + DO \quad (2)$$

The summary section provides concise metrics on the anticipated condition of RLM and employment status post-program implementation, including the rural working-age demographic, labor demand and supply composition, wage levels, new job creation, employment ratios, and labor resources.

The organizational and economic mechanism section includes a program management system, measures to improve and harmonize economic standards, resource allocation management methods, and control forms and methods for program tasks.

Table 1 provides a forecast of new jobs and employment in agricultural clusters and cooperatives and other sectors of the rural economy of Uzbekistan, showing indicators for 2022 and projections for 2023-2025, highlighting changes in job creation and employment levels across various agricultural sectors.

**Table 1: Forecast of new jobs and employment in agricultural clusters and cooperatives and other sectors of the rural economy of Republic of Uzbekistan**

No	Name of the agricultural sector	Indicators and units of measurement	2022 (report)	Forecast period			Change in 2025 compared to 2022	
				2023	2024	2025	+; -	%
I.	Overall, for the agricultural sector, including:	New jobs, pcs	99,524	104,798	107,435	112,713	+13,184	113.3
		Employed population, people	115,789	122,483	125,830	132,525	+16,736	114.5
1.1.	By agricultural categories-total, including:	New jobs, pcs	74,010	79,980	82,965	88,940	+14,930	120.2
		Employed population, people	82,854	93,536	98,877	109,563	+26,709	132.2
1.1.1.	Cottonovo-textilesing	New jobs, pcs	38,028	42,739	45,095	47,450	+9,422	124.8
		Employed population, people	44,235	49,905	52,740	55,575	+11,345	125.6
1.1.2.	Grain	New jobs, pcs	3,118	3,266	3,341	3,415	+297	109.5
		Employed population, people	3,563	3,690	3,753	3,816	+253	107.1
1.1.3.	Animal	New jobs, pcs	10,721	11,413	11,759	12,552	+1,831	117.1
		Employed population, people	12,474	13,340	13,773	14,639	+2,165	117.4
1.1.4.	Produce	New jobs, pcs	17,249	18,532	19,173	20,556	+3,307	119.2
		Employed population, people	20,071	21,662	22,457	24,048	+3,977	119.8
1.1.5.	Silkthe manual	New jobs, pcs	1,936	2,158	2,269	2,490	+554	128.6
		Employed population, people	2,255	2,524	2,659	2,928	+673	129.8
1.1.6.	Fishing	New jobs, pcs	1,204	1,221	1,229	1,245	+41	103.4
		Employed population, people	1,400	1,426	1,439	1,464	+64	104.6
1.1.7.	Agrotourism	New jobs, pcs	871	949	988	1,067	+196	122.5
		Employed population, people	1,013	1,110	1,158	1,255	+242	123.9
1.1.8.	Medicinal plants	New jobs, pcs	589	630	650	712	+123	120.9
		Employed population, people	651	713	744	837	+186	128.6
1.2.	Agricultural cooperatives	New jobs, pcs	4,909	5,106	5,204	5,302	+393	108.0
		Employed population, people	5,401	5,617	5,725	5,942	+541	110.0
1.3.	Private farmers and farms	New jobs, pcs	24,822	26,081	26,711	27,971	+3,149	112.7
		Employed population, people	26,663	28,586	29,547	31,470	+4,807	118.0
II.	Non-agricultural sectors	New jobs, pcs	206,744	227,996	238,622	259,874	+53,130	125.7
		Employed population, people	252,349	279,611	293,242	320,504	+68,155	127.0
In rural areas-all		New jobs, pcs	293,006	332,796	346,060	372,587	+79,521	127.2
		Employed population, people	373,797	413,413	433,221	453,029	+79,232	121.2

Source: This table was compiled by the author

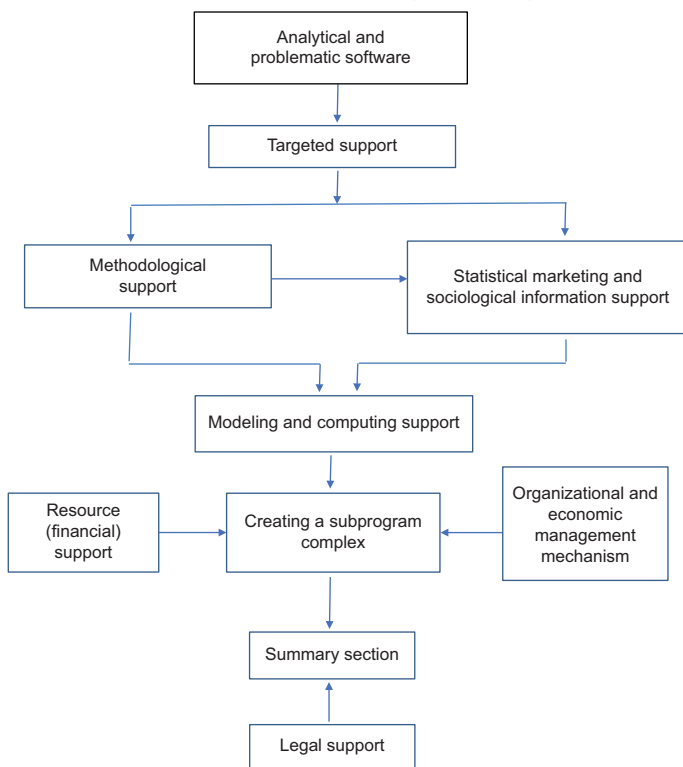
In the legal framework section, statutory and regulatory instruments governing the operations of program entities are detailed, particularly in areas concerning labor market regulation and social welfare provisions. New regulatory provisions are communicated promptly to program implementers.

### 3. RESULTS

The development and management of the targeted comprehensive program for the development of the rural labor market (TCPDRLM) were carried out in a series of systematic stages. These stages included:

- Formation of Goals: Establishing clear, targeted objectives to guide the program.
- Development of Methodological and Model Apparatus: Creating tools for analyzing and forecasting labor market trends.
- Collection of Information: Gathering statistical, marketing, and sociological data.
- Subprogram Formulation: Drawing up specific components within the overall program.
- Approval and Implementation: Official endorsement of the program, followed by the creation of mechanisms for its

**Figure 1:** Stages of the comprehensive program for the development of the rural labor market (TCPDRLM)



Source: This figure was compiled by the author

management and adaptation.

Following the endorsement of the model support by the central committee for the development of labor and social development, we projected key indicators forecasting a reduction in informal employment among the rural working-age populace of the Republic of Uzbekistan until 2025. This reduction is expected through the augmentation of job opportunities within agricultural clusters, cooperatives, farms, and personal subsidiary plots.

The organization of agricultural clusters and cooperatives is anticipated to have a direct positive impact on employment within the sector in the coming years, significantly reducing the incidence of informal employment among the working-age population.

#### 3.1. Job Creation in Agriculture

In 2022, a total of 99,524 new jobs were created within the agricultural sector under the program. Projections indicate a rise in the number of new employments in this sector, with new jobs expected to increase to 112,713 by 2025. Clusters within the agricultural sector will see job creation rising from 74,010 in 2022 to 88,940 in 2025. Similarly, jobs in agricultural cooperatives will increase from 4909 to 5302, and in private farms and smallholdings, from 24,822 to 27,971 (Table 1).

#### 3.2. Job Creation in Non-Agricultural Sectors

Over the forecast period, job creation in the non-agricultural sector is poised to rise from 206,744 in 2022 to 259,874 in 2025. This sector will benefit from targeted state programs aimed at fostering employment within agricultural clusters and cooperatives, thereby driving down informal employment rates.

#### 3.3. Reduction of Informal Employment

The emphasis on creating new job opportunities in agricultural clusters and cooperatives is projected to decrease informal employment in rural areas. Table 2 shows that in 2022, the rural workforce consisted of 10,651.8 thousand individuals, projected to rise to 11,303.7 thousand by 2025. The number of individuals engaged in informal employment is expected to decrease by 355.5 thousand due to the creation of formal job opportunities. Specifically, the proportion of the rural workforce in informal employment is anticipated to drop from 56.9% in 2022 to 50.9% in 2025.

#### 3.4. Analysis

The data analysis reveals a notable trend: The rural workforce, which included 10,651.8 thousand individuals in 2022, is projected to increase to 11,303.7 thousand by 2025. This growth is paralleled by a reduction in informal employment, attributed to the effective establishment of agricultural clusters, cooperatives, and private

**Table 2: Forecast of Informal Employment in Rural Areas of the Republic of Uzbekistan (in thousands)**

No	Name of indicators	2022 (report)	2023	2024	2025	2025/2022, %
1	Total number of people employed in rural areas	10,651.8	10,864.8	11,082.1	11,303.7	106.1
1.1	Including					
1.1.1	In the informal sector	6,060.9	5,943.0	5,884.6	5,753.6	95
1.1.2	Informal sector share, %	56.9	54.7	53.1	50.9	×

Source: The author compiled the data depicted in this figure



farms, leading to the creation of formal job opportunities. The share of informally employed individuals is forecasted to decline from 56.9% in 2022 to 50.9% by 2025. This indicates a significant shift towards formal employment structures, driven by targeted economic and organizational initiatives under the TCPDRLM.

#### 4. DISCUSSION AND CONCLUSION

In the rural regions of the Republic of Uzbekistan, there exists a significant imbalance between labor supply and demand. This imbalance necessitates strategic interventions to create a more balanced and efficient labor market. In formulating the territorial comprehensive program for decent rural labor markets (TCPDRLM), we propose the inclusion of several key initiatives aimed at addressing this disparity:

1. Creation of new employment opportunities
  - Agricultural clusters, cooperatives, and farms: Focus on establishing new job opportunities within these entities, tailored to the specific needs of crop cultivation and livestock management. This approach leverages the inherent strengths of rural areas and their agricultural potential.
2. Job creation in non-agricultural sectors
  - Processing industries, construction, and domestic services: Encourage the development of these sectors, which require relatively lower investments compared to other forms of labor activities. This diversification will help absorb excess labor from the agricultural sector and provide more stable employment options.
3. Promotion of family-run enterprises
  - Agricultural sectors: Support family-run enterprises in agriculture, where low-cost employment opportunities can be organized, leading to substantial labor income. This initiative capitalizes on the traditional family structures prevalent in rural areas and enhances local economic resilience.
4. Support for small-scale enterprises and private entrepreneurship
  - Financial and economic mechanisms: Expand labor engagement in small-scale enterprises and private entrepreneurship through various support mechanisms, including tax incentives and micro-financing. These measures will empower rural entrepreneurs and stimulate local economic activity.
5. Facilitation of intra-national migration
  - Financial backing: Create favorable conditions for the migration of rural workers within Uzbekistan, supported by substantial financial resources. This will help balance labor distribution across regions and alleviate pressure on areas with excessive labor supply.
6. Organized labor exports
  - International labor agreements: Enhance organized labor exports to specific foreign employers, especially in agriculture, through agreements that comply with international labor standards. This initiative provides an outlet for surplus labor while ensuring the protection and fair treatment of workers abroad.
7. Efficiency enhancement in employment services
  - State and private entities: Improve the effectiveness of both

state employment services and private entities involved in unemployment alleviation through organizational and economic support. Strengthening these institutions will enhance their capacity to connect job seekers with available opportunities.

8. Strategic framework for rational employment
  - Central committee for labor and social development: Develop a comprehensive strategic framework under the guidance of this central committee to ensure the rational employment of the rural workforce. This framework will coordinate efforts across various sectors and regions, ensuring a cohesive approach to labor market development.

These initiatives, derived from findings during the CMC testing phase, offer a holistic approach to addressing the labor market challenges in rural Uzbekistan. They are not only applicable within the country but also hold potential for other regions facing similar labor market dynamics. The focus on diverse sectors, support for entrepreneurship, and strategic migration and labor export policies collectively aim to reduce informal employment and enhance economic stability in rural areas.

The proposed methodology delineates precise metrics, timelines, responsible parties, and financial channels to implement strategies that balance labor supply and demand, reducing unemployment to a tolerable level in labor-surplus rural regions of Uzbekistan. The comprehensive coordination mechanism (CCM) is crucial for understanding informal employment and applying these insights to improve the operations of rural labor exchanges, ultimately fostering sustainable rural development.

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