

INDEPENDENT SERVICE OF SOCIOLOGY AND INFORMATION

"OPINIA"

MOLDOVA SOCIAL INVESTMENT FUND

**ASSESSMENT OF THE SOCIAL-ECONOMIC STATUS OF
RURAL COMMUNITIES IN THE REPUBLIC OF MOLDOVA IN
1997**

Baseline study

Chisinau, 2001

Assessment of the social-economic status of rural communities in the Republic of Moldova in 1997

I. I N T R O D U C T I O N

1.1. *Opportunity and necessity to draft the report*

The present report is worked out by the Independent Service of Sociology and Information *Opinia* (SISI *Opinia*) at the request of the Moldova Social Investment Fund (MSIF). The aim of the report is to evaluate the social-economic situation of rural communities in the Republic of Moldova, identify the main problems in this domain. Especially emphases are made on the status of social, economic, and municipal infrastructure as well as the financial, technical, material, organizational and psychological means/facilities necessary to solve the regarded problems.

The macro and microeconomic analysis is accomplished. The urgent social needs and capacities of the community to identify, draft and carry out micro-projects for solving the social issues are studied.

The preliminary study of the infrastructure of rural communities has set off an extremely deplorable situation of the majority of school, preschool, health, cultural and sports institutions; of road, water, natural gas, electric power, heating, telecommunication and information networks; and also a high level of environment deterioration and pollution, especially of the dwelling area.

The economic crisis, which persists during the last years and is accompanied by the tergiversation of the economic reforms in agriculture, has lead to the degradation of the rural economy, pauperization of population, so that the income of over 60% of people is beyond the minimum of subsistence. As a result of these phenomena the central and local budgets are in a complete austerity. There are tiny possibilities to attract the financial means of the population to solve the mentioned problems. The agricultural enterprises, which used to cover the core costs needed for the development and operation of social, communal and municipal infrastructure are at present insolvent.

Taking into account these realities, the Government of Moldova has established the Moldova Social Investment Fund as an autonomous public organization meant to set forth the primary necessities of rural communities regarding the rehabilitation of social infrastructure and to finance the respective micro projects.

Drafting the present report is justified by the necessity of identification of priorities, sequence and the main directions in the MSIF' s activity carried out together with the local representatives in order to improve the social, economic and psychological situation in the rural area and strengthen the capacities of the people to settle their own problems.

1.2. Main objectives of the report

Making allowance for the situation in the rural area in Moldova and the mission, tasks and functions of the MSIF, the main objectives of this report are as follows:

- to assess the impact of transition to the market economy and point out the most urgent social, economic and psychological problems faced by the rural communities;
- to determine the financial, organizational, management, and institutional capacities to solve the emphasized problems, inclusively by getting involved into the implementation of MSIF projects;
- to prove the necessity of involving MSIF into the process of solving the evoked difficulties;
- to draft conclusions and recommendations meant to optimize the organizational-financial mechanism for supporting the rural sector in the Republic of Moldova;
- to describe in details the state of the rural sector at the moment of launching the MSIF activities in Moldova, which will serve as a comparative example when evaluating the efficiency of Fund's activity aimed to solve the rural problems.

1.3. Methods, techniques and sources of information

The present report was drafted according to the generally accepted standards. It contains the analysis of the evolution of social-economic situation and the municipal infrastructure of the rural sector, making use of:

- a) Official statistical data from the Department of statistics and sociological analysis, ministries and departments, local public bodies;
- b) Results of sociological investigations of *SISI Opinia* carried out in 43 localities that covered 1698 agents, 959 in the rural sector inclusively;
- c) Data resulted from the Research of Needs and Capacities in Moldova, accomplished by the NGO *ADSISTO*;
- d) Data from scientific research institutions;
- e) Data offered by the international organizations (UNDP, USAID, TACIS etc.);
- f) MSIF databank regarding the evaluation of urgent needs and potential of communes/villages, which contains the well-organized description of social-economic situation in 95 communities;
- g) Evaluations effected by independent experts, local ones inclusively.

This draft report takes into account the provisions of conceptions, strategies, action programs and plans of reforming and development of the rural, agro-alimentation sector of the national economy, social sphere (health, education, culture, sport etc.)

The core method used for drafting the report is the systematic broach of the subject under study, based on scientific qualitative and quantitative analysis of the system and subsystem components of the rural sector, identifying the direct and indirect interdependencies and connections between them.

The drafted report took also into consideration the legislation and norms in force, decisions of the Government, decisions of ministries and departments regarding the respective domains.

It is necessary to stress that at present the Statistics Department is under process of reformation and adjustment to the UN norms. Due to that, a number of inconveniences appeared and we cannot guarantee a complete and adequate compatibility of values of the official statistical data.

II. MAIN CHARACTERISTICS OF THE RURAL SECTOR IN THE REPUBLIC OF MOLDOVA

2.1. General information

As a result of the Soviet Union brake, in 1991 the Republic of Moldova declared its independence.

Situated in the south-eastern part of Central Europe (north-east side of the Black Sea, between the Prut and Nistru Rivers, bordering with Romania and Ukraine), the Republic of Moldova occupies a territory of 33,800 sq. km. With a population of 4,32 million people, or 128 inhabitants per km², Moldova is one of the most densely populated European countries. The rural population constitutes 54%.

In 1997 Moldova was divided into 40 territorial-administrative districts, with 4 cities/towns having a municipal status (Chisinau, Balti, Tighina, Bender), 61 urban units with no municipal status, and 1600 villages administratively united in 925 communes.

Moldova has a territory with an excessive degree of anthropogenic exploitation of the natural space. Over 10% of the national territory is occupied by human settlements. By comparison with the neighboring states, the density of settlements network in Moldova is higher: 5 settlements per 100 km².

Climate considerably varies from zone to zone and depends on the relief. Its average altitude is 147 m, while the highest point, as against the sea level, is 430 m.

Although the territory of the republic is small, there are 3 agro-climatic zones that gradually change, the south one being the warmest and with lest rainfall. The warm season lasts from 160 to

190 days. A negative feature of the climate is its variability, especially in the springtime. During the vegetation period the droughts are often. The average quantity of rainfall constitutes approximately 400-600 mm. (380 mm in the south, 500-600 mm in the central and northern part).

Vivid differences between the characteristics of natural and climatic nature highly influenced the level of social-economic development of respective zones, respectively the income level, living standards, structure of agricultural and industrial production, economic and social infrastructure.

2.2. Disparities between rural and urban

2.2.1. Historical and political aspects

Although the Moldovan villages did not witness a mass depopulation during the postwar period, common with other ex-soviet zones, that global process still affected them. The exodus of the most active, educated and enterprising part of the population to the largest cities and towns of the republic substantially affected the vitality of rural communities.

The social integration of urban and rural communities is assured first of all by the official ideology and only to a small degree by the internal processes of solidarity. The premises of dissensions and crises of the 90s appeared prior to the reform period.

Once the political independence was proclaimed and the reforms launched, the old system of centralized planning of localities' development abolished. The institutional and legislative changes in this domain lacked far behind the real social-economic processes. In conditions of general crisis, the outcomes of old geopolitics were not late to come at the local level: the artificially supported economic and social structures collapsed, old problems became acute, new ones appeared. A negative impact on development registered all territorial levels, the social climate of settlements worsened.

As a result of all that, significant disproportion, discrepancies, and difficulties appeared, having their roots stroked in the past but affecting the present living standards of the population and menacing the social cohesion and sustainable development.

Many cities enlarged due to foreign immigration while the native population enjoys less the economic and cultural facilities offered by the urbanization.

2.2.2. Social-economic aspects

From the social point of view, a substantial discrepancy between the rural and urban is recorded. Villages, where live 54% of the population that activate in the core sector of economy, have a very poor municipal infrastructure (scanty access to water, sewerage, and gas systems/installations, bad local roads, etc.). According to the 1997 data, out of 1617 villages 17% have neither hospitals nor first-aid posts. In 16% of villages there are no preschool institutions, in 24% schools are located in adapted buildings and do not correspond to the sanitary and hygienic standards. 3,7% of villages have no schools, 19% - have no libraries, 16%- cinema facilities, 31% - post offices.

The recent sociological researches show that 65% of people affected by poverty live in rural areas; while in the urban sector this contingent constitutes 33%.

2.2.3. Network of rural settlements

The postwar development pattern essentially modified the distribution and typology of rural establishments. Going back to the origins, we can see that the Moldovan village formed itself within the framework of a long historical process of social-economic development, where plant cultivation and cattle breeding were and still are the main trades of local population. The village, at the beginning predominantly agricultural, gradually acquired additional non-agricultural activities, which brought to it a higher technical-municipal and social-cultural dowering. Later on, alongside with its traditional functions, as a habitat and agricultural production settlement, its economic profile becomes more complex with new industrial, social-cultural, health, and sports functions, but less traveling and entertainment activities etc.

For a couple of postwar decades the development of settlements system in Moldova, similar to the whole USSR, has been under a rigid control on behalf of the state. Depending on the geopolitical objectives, it used to plan: the economic profile of regions and settlements, functional links between them, forced industrialization of certain zones and mass migration of population. Planning of rural and urban settlements was considered to be a top secret. It was neither coordinated nor accessible to the population, and in fact it did not adequately reflect the interests of local communities.

The control over the development rhythm of rural localities and core elements of technical and social infrastructures has been carried out first of all by the ministries and departments in charge and only in some limited cases by the local public administration.

The structure of rural settlements has a strong extensive character. While the dwelling area terrains are explored irrationally, in villages especially new plots are attributed to constructions. In great majority of rural localities the municipal endowments/supplies either are missing or are too rudimentary, due to which the environment pollution with domestic wastes becomes one of the most urgent problem with a negative impact on the health of rural population.

The settlements network, looked upon as a multifunctional system, faces serious problems. The functional links between the localities are perturbed. Break up of large agro-industrial enterprises, increase of services costs, especially the transport ones, have limited the possibilities of rural population to travel to neighboring cities/towns for job or service reasons.

Un unforeseen aspect that regards the human communities and which requires special investigations, is constituted by the new settlements, appeared on territories attributed to plots and cottage planning. When distributing those plots it was not taken into consideration that some sectors would be permanently populated/inhabited. In reality, new settlements appeared with specific problems and respective impact on environment.

As a result, readjustment of development principles of rural establishments network to the new conditions of transition to the market economy, of globalization and European integration, imposes elaboration of a new conception of rural development as a production, habitat, consume and leisure location.

2.3. Demographic phenomena and manpower employment

2.3.1. Demographic potential

Although the Moldovan villages did not witness a mass depopulation during the postwar period, common with other ex-soviet zones, that global process still affected them. The exodus of the most active, educated and enterprising part of the population to the largest cities and towns of the republic substantially affected the vitality and entrepreneurial capacities of rural communities.

Within the years 1989-1997 the correlation between different migration trends depending on the living place of the population suffered changes. A sudden move of migration in the direction city-village during 1992-1993 was caused by the deterioration of the social-economic situation of the country, sharp decrease of incomes and increase of the role of individual/natural husbandries for the vital activity of the human being.

Comparatively to the year of 1991, the number of urban population diminishes in 1997 by 70.000 people, while the rural population grows up by 10.000 persons. Within the same period the birth rate was under a permanent decrease, as for mortality -it moved up, so that in the long run these two indices got equal by 1997.

The *birth rate* in the rural sector went down from 22,1 in 1985 to 13,8 persons per 1000 inhabitants. In the same period mortality increased from 11,5 to 13,4 people per 1000 inhabitants.

Exaggerated *mortality* in the rural area is determined first of all by the poor living standards, this parameter being two times higher than the number of deaths in the urban sector. The coefficient of population ageing (number of people of 60 and over years per 100 inhabitants) in the Republic of Moldova increased from 10,7 in 1980 to 13,3 in 1997.

The economic decline of last years has provoked a massive extension of unemployment, which leads to an expansion of internal and external migration.

2.3.2. Manpower employment

The population engaged in economic activities in 1997 accounted for 1646.000 persons, inclusively in agriculture and silviculture 683.000 persons (or 41% of the totally employed population), which is by 30.000 people less than in the previous year.

Unemployment rate calculated according to the methodology of the International Labor Office constituted over 8-10%, while the same index in the European countries is 4-5%. In the rural sector unemployment is considerably higher than in the urban one and reaches the figure of 15-17%. Taking into account the reorganization and privatization processes of all agricultural

enterprises, within the next 2-3 years about 200-300 thousand employees will be dismissed, a fact that will cause serious economic and social problems and a substantial growth of pauperization and criminality in the rural communities.

The Moldovan village faces a notable emigration of labor force and a structural unemployment typical for the underdeveloped countries, where economy is not capable to create sufficient jobs. The main categories of population affected by numerous dismissals are and will be the youth and pre-pension aged people.

Many of the dismissed people immigrate illegally, thus enjoying no rights on the foreign labor markets.

The number of women dismissed from agricultural activities is much higher than the one of men. Permanently grows the number of employees hired in the private agricultural sector. The legislative framework meant to regulate the economic relationships amongst the employees, employers and managers of agricultural enterprises is under process of elaboration.

2.4. Quality of life and living standards

2.4.1. Impact of transition on the quality of life

Starting from the axiomatic premise of sustainable development (according to which the economic development is not a scope in itself but just a means to assure the improvement of living standards) we will state that until now the social infrastructure in villages was under direct dependence of local agricultural and industrial enterprises. For example, engineering systems were common with the enterprises of the housing fund, schools, and kindergartens. The same with the medical institutions, cultural establishments, institutions for providing sports, commerce, transport, leisure, telecommunication services etc. Thus, the substantial decline in the respective production, caused by the tergiversation and inconsequence of reformation process of the agro -industrial sector, had a vivid negative impact on core elements of infrastructure. This affects the whole rural community and especially the vulnerable categories of the population: children, old people, invalids, women, etc.

The delay and contradictory character of agricultural reforms caused a striking and growing inequality between the rural and urban sectors. In comparison to the urban settlements the rural population has much lower incomes and wages, less comfortable houses/apartments, fewer transport means and power resources, little access to informational and telecommunication technologies. This fact affects the social cohesion and generates desegregation tendencies. The unequal opportunities between the urban and rural communities led to an unequal human development. At present, the main components of the rural social system (education, health care,

culture) are marked by an acute shortage in terms of volume, diversity and quality of offered services.

2.4.2. Incomes of population and food security

In 1997 the share of financial incomes in the urban areas decreased by 16,4 % as against 1990. In the rural sector that index diminished in the same period 2,7 times.

Salaries in agriculture are the lowest in comparison with the main domains of activity. For the sake of confirmation: the average wages in 1997 constituted roughly: in the financial-banking sphere 823 lei, electro-energetic and gas stations sector 427 lei, processing industry - 352 lei, education – 171 lei, health care and social protection – 176 lei, agriculture – 135 lei. The dynamics of salaries is represented in table No. 1.

Table 1

Nominal incomes of population

Indicators	1994	1995	1996	1997
Financial incomes (average per inhabitant per year), lei	884	1419	1779	1974
Share of population with financial incomes less than 90 lei monthly per member of family, %.	63	57	48	65
Average nominal salary of an economy worker , lei	108.4	143.2	187.1	219.8
Inclusive:				
– agriculture	82.4	103.6	121.5	135.2
– industry	153.0	220.0	290.8	363.8
Labor distribution rate in financial incomes, %	44	38	33	36

It has been proved that poverty is sterner in the rural communities. The Republic of Moldova is not an exception.

The unfavorable discrepancy of incomes with the rural population in Moldova is really impressing if to mention that wage level here is the lowest in comparison with other transition countries. Thus, if the average monthly salary in Moldova in 1996 was 40 \$US, in Uzbekistan it constituted respectively 54 \$US, Belarus – 89 \$US, Ukraine – 84 \$US, Kazakhstan – 102 \$US, Russia – 154 \$US, Romania – 131\$US.

Covering the minimum of subsistence budget with the financial incomes of a rural inhabitant by 1/3 (the country mean being 45-50 %) limits the possibilities of village residents to meet their minimal primary needs. This situation makes impossible the access of the population to communal, education, paid medicine, information services, etc as well as their participation in

common activities: building and reparation of roads, reparation of schools, kinder gardens, culture institutions, hospitals, territory and settlements laying out.

Income diminution has extremely negative repercussions on the population capacities to satisfy its fundamental needs for existence and first of all the food needs. It should be mentioned that in the consume structure the costs of food products constitute 66% on the whole in the republic and 70% in the rural sector.

In the Republic of Moldova, an agro-industrial country, the quantity of calories daily consumed by one person decreased from 3281 in 1980 to 2969 in 1990. In 1994 the alimentary consume constituted only 2127 calories, at present this index being far below the world level, and its decreasing tendency contradicts with the international one (see table 1). The caloric medium raises a serious anxiety because it is under the “caloric limit” fixed by the FAO – 2500 calories and reached the level of undeveloped countries.

Although within the last decades the world is confronted with the sub nutrition phenomenon, the efforts undertaken to overcome this situation resulted in an increase of food consume at least in some geographical areas and in the developed countries with market economy.

Table 2

**Evolution of alimentary consume all over the world
(calories per day / person)**

Geographical areas and categories of countries	1961-1963	1984-1986	1988	1996
Africa	2093	2299	2149	2205
North America	3189	3642	3730	3642
Europe	3098	3397	3480	3504
Developing countries	1942	2464	2246	2628
Developed countries with market economy	3030	3362	3454	3377
Total	2296	2694	2537	2751

Starting with 1990 the Republic of Moldova has been witnessing a sharp decrease not only in terms of food consume but also in terms of main categories of products. For instance, in 1997 the meat and meat products constituted 43% as against the level of 1990, milk and milk products – 51%, sugar – 37%. Slightly slower diminished the consume of other food products.

As a consequence, a considerable part of the population in Moldova starves. Malnutrition badly affects the health of the people. Morbidity and mortality grow up, the vitality potential of the nation diminishes.

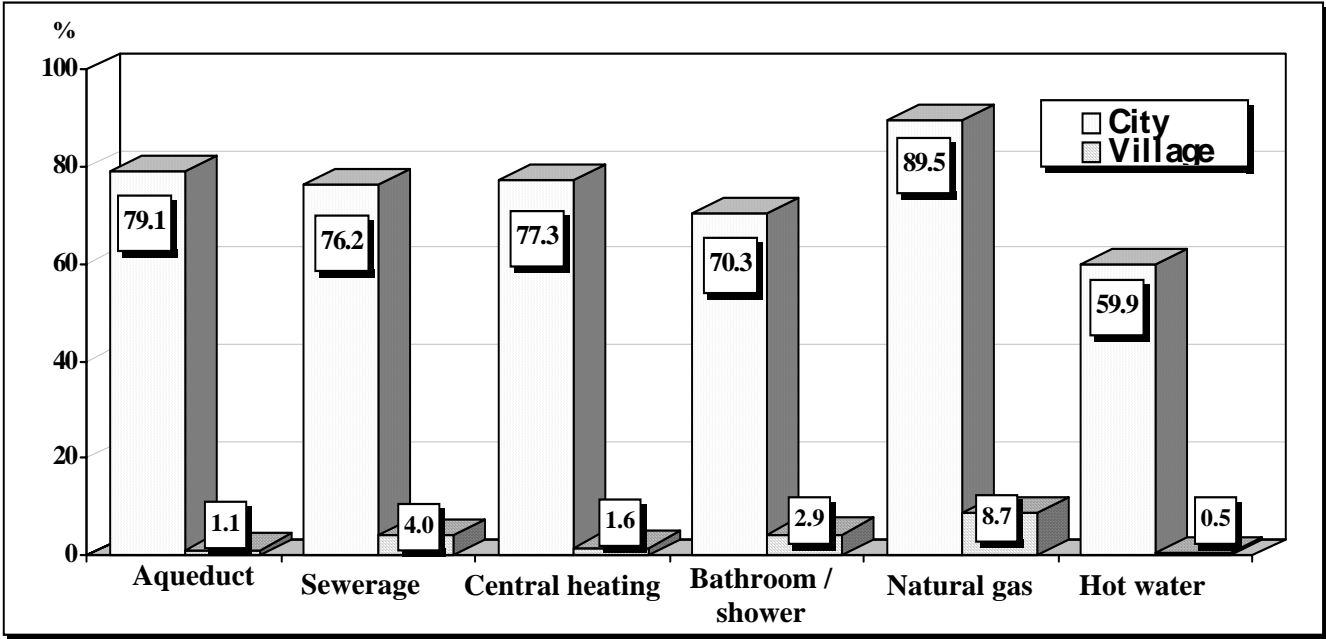
2.4.3. Level of fitting out the tenement fund

A peculiarity of the Republic of Moldova is the fact that the great majority of rural population is concentrated in big villages (2000 – 10000 inhabitants), but these villages do not have adequate social and technical infrastructures. Because of financial shortage, the constructions made of less durable materials, are not of good quality and permanently need reparation and renovation.

There is a huge gap between the city and village if we refer to the parameters of the level of equipping the housing fund. (See diagram 1).

Diagram 1

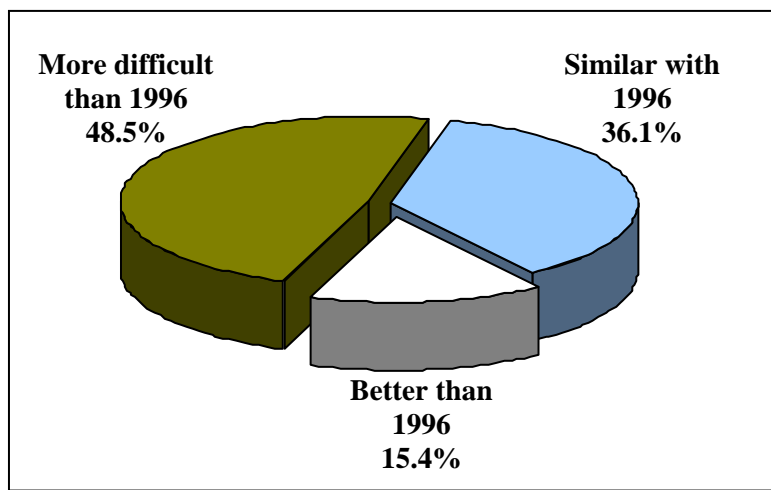
Level of fitting out the tenement fund: urban and rural



As far as the living conditions are concerned and the dowering level of houses/apartments with water, lavatory & bathroom, heating and lightning systems etc. the village shows a vivid lagging behind the city, which is an impediment to the development of its vocation and perseverance of an equilibrium between the standards of social life in these two environments.

2.5. Frame of mind of the rural population

The “depressive stagnation” caused by the negative evolution of national economy deepens the social crisis with all its components: poverty, unemployment, moral degradation, corruption, criminality, worsening of public authorities etc. The population was seriously affected by these phenomena, and majority of people, because of lack of real possibilities to show their public initiative, did not behaviorally integrate into the local communities, did not realize the necessity to adjust to the new social-economic conditions, thus losing their faith in future. The same has been proved by the analysis of the frame of mind of people based on the annual sociologic study “Society



barometer”, carried out by the SISI “Opinia” at the end of 1997. The sociological data reflect the public opinion, mood and real state of mind of the population of the republic on many urgent issues of society.

**How was the year 1997 for You in comparison with 1996?
Diagram 2**

Approximately 49% of people evaluated the year 1997 as more difficult than the previous one, 36% - of similar potential, and only 15% considered it to be a better one. Assessing the personal welfare level in 1997 as against 1996, just 14% of respondents declared that it improved slightly or considerably, 39% - stated it as unchanged, and over 45% - as slightly or considerably worsened.

Approximately 60% of rural residents consider that social sphere develops in a wrong direction and only 30% support the taken direction.

It is relevant to be mentioned that 57% of the rural population stated that the republic in general adopted a wrong direction of development and only 30% are in favor of the adopted direction.

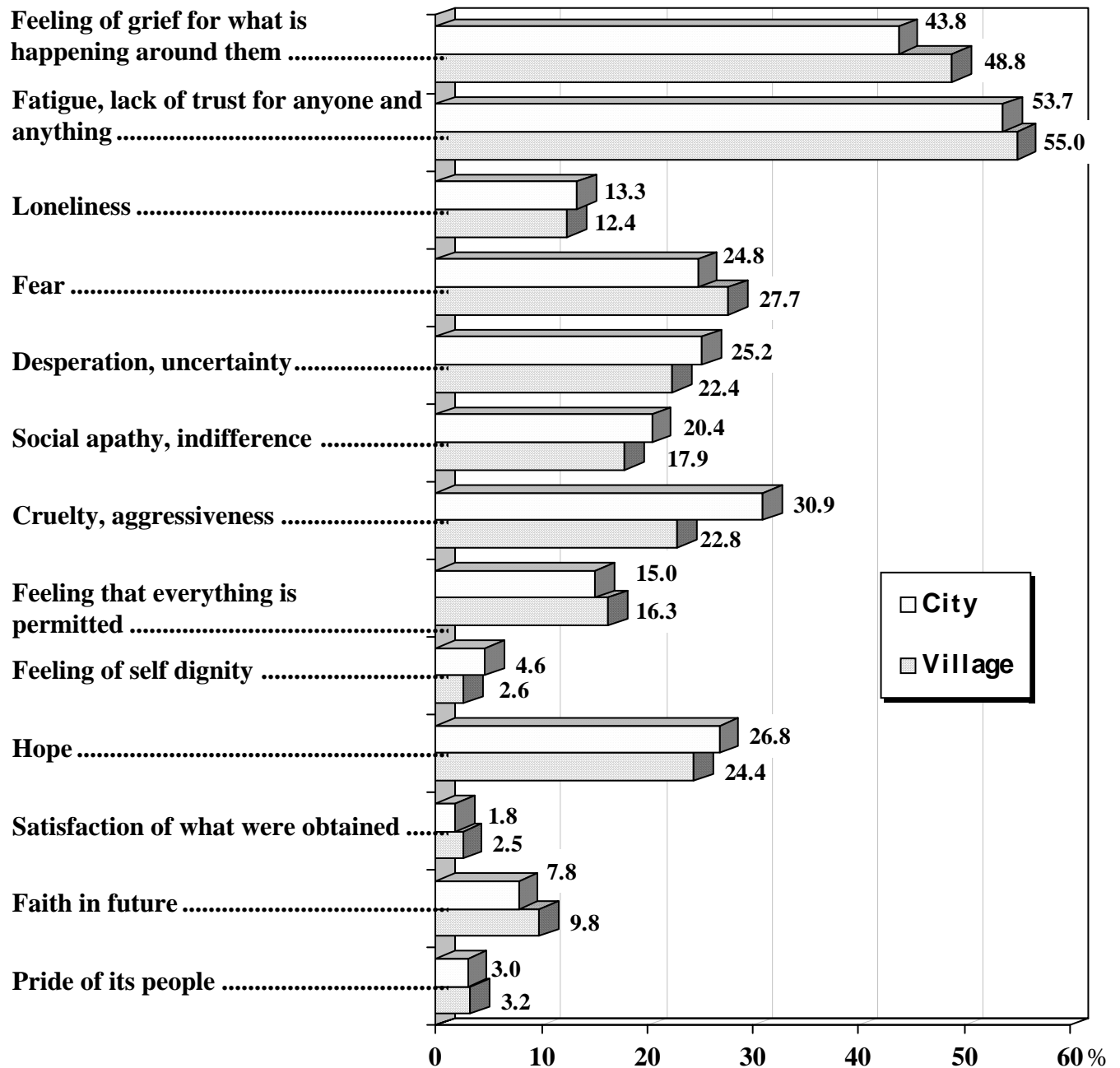
As a consequence, the rural population evaluated its own situation (state of mind) as average, 45% - as poor or very bad. The assessment of economic situation of individual families showed that roughly 52% of village inhabitants consider it to be poor or very poor, 42% - as average and only 6% - stated it as a good one.

Evaluation of the health state of people shows that these standards are far below the average level: 45% of respondents have an average health condition, and 32% - a bad or a very bad one.

The state of mind of rural population in comparison with the urban population is shown in diagram 3.

Diagram 3

Frame of mind of population



The respondents' answers show a general feeling of fatigue, lack of trust for anyone and anything (55%). People are seized with a feeling of grief for what is happening around them, fear

experience 28%, cruelty, aggression – 23%, uncertainty, desperation – 22%, and only 24% of respondents have a trust for a better future.

The phenomena that raise a big anxiety among the respondents from rural areas are exposed in table 3.

Table 3

Estimation of society gaps by respondents

Answers	Village (%)	City (%)
General state of things in the republic, our future	43.6	33.5
Price increase, inflation, worsening of living standards, poverty	77.8	76.2
Arrears in wage and pension payment	79.3	64.6
Chaos and anarchy, lack of discipline everywhere and at all level	51.4	43.7
Crisis in economy, decreasing of production, low level of administration	33.5	34.3
Corruption, the shamelessness of Mafia and delinquency, thefts	41.0	52.4
Unemployment	35.5	38.6
Social protection and equity, luck of attention and care given to the needs and problems of population	20.8	21.4
Conflicts and intrigues, lack of concordance of actions between different branches of power	7.3	7.9
Weakness, incompetence and impotence of state power	11.6	18.1
Crisis of moral, culture and spirituality, tension of relation between the people	10.6	20.3
Losing the interest to work honestly and productive	18.3	17.7
Interethnic extremism and separatism, decomposition of republic	3.9	6.9
Destroying of environment	14.2	15.8

The answers of respondents denote a vivid alarm for such deviant aspects of society as: arrears in wage and pension payments - 79%, price increase, inflation, worsening of living standards, poverty – 78%, chaos, anarchy, lack of discipline everywhere and at all levels - 51%. Villagers are also worried by the general state of things in the country – 43% of people.

When the respondents were asked to speak about the eventual actions to be undertaken if prices will still grow up but the living standards will worsen, the majority of respondents said they would be looking for another job - 35%, 30% will look for a job abroad, 30% will protest against that, will look for a better-paid job – 23%.

When only 2,5% people are satisfied with what they have accomplished/achieved, 2,6% have the feeling of personal dignity, but only 3,2% are proud of their people, and that leads to a general anemic state, social contradictions and conflicts, lack of trust for tomorrow and local and national decision makers to solve the problems of society.

III. ECONOMIC FRAMEWORK OF RURAL DEVELOPMENT

3.1. General assessment of the economic situation in the rural sector

3.1.1. Macroeconomic tendencies

The evolution of the agro-alimentation complex in the Republic of Moldova is accompanied by an increase of a fundamental discrepancy: on one hand the excessive weight of this sphere in the national economy and its dominant character in the export volume, and on the other hand deepening of the discrepancy between the living standards of rural and urban population, in the disfavor of the first category of population.

The national economic decline caused a reduction of the GDP, it accounting only 34% in 1997 as compared to 1990. Despite the internal efforts and external financial contributions, the deficit of a consolidated budget remains to be high, a fact which contributes to the increase of public debts.

These indices prove that the social-economic situation in the country is tragic, and this is a consequence of a long crisis in all the domains of human development.

In the context of this report it is important to take into account the fact that the efforts undertaken to improve the structural characteristics of the national economy were not sufficient. In fact it continues to be energy and material saving, in many cases oriented towards the export of raw material (especially the agricultural one).

The accelerated degradation of the macroeconomic situation at the national level and tergiversation of reforms in agriculture had a negative impact on agro-alimentation sector. The volume of agro-alimentation products in 1997 constituted only 60% as compared to the level of the year 1990.

3.1.2. Evolution of economic situation in agriculture

The economic decline at macro level and reform tergiversation in agriculture led to the degradation of systems of: a) production, b) management, c) finances, d) ecology, e) human

resources, f) marketing, g) technology and the ones of horizontal and vertical integration of the components of agro-industrial complex.

These negative tendencies have found expression also in the permanently decreasing volumes of production of main crops (See table 4).

Table 4

Volumes of production of main crops for years 1989-1997 (thousands tones)

Crops	YEARS					
	1989	1990	Average 1991-1995	1995	1996	1997
Cereals and vegetables, of which:	3323	2539	2594	2668	2010	3549
Wheat	1129	1129	1062	1274	784	1345
Barley	467	438	407	305	141	288
Maize	1586	886	1014	979	1037	1831
Vegetables - bean	147	97	95	56	32	64
Sunflower	282	252	188	232	316	201
Soy (beans)	51	24	12	3	3	3
Sugar beet	3612	2375	2019	2084	1917	1880
Tobacco	67	66	45	27	20	24
Potato	464	295	440	401	483	440
Vegetables	1203	1177	752	607	394	420
Fruits and berries	1176	901	714	610	573	1070
Grapes	1037	940	814	876	789	310

The decline of animal production was even worse. The meat production (live cattle) decreased from 530.000 tones in 1990 to 181.000 tones in 1997, milk production respectively from 1511 to 666 thousand tones, eggs – from 1129 to 582 mln. items.

The volume of agricultural production diminished, first of all, due to the quantity reduction of fertilizers, administered in soil and means of plant protection worsening of quality of plant and

seed tree material, decrease of quantity and quality of fodder for cattle breeding, non-observance of technologies and agro-technical procedures, etc. The aforementioned factors had also a bad impact on production of agricultural plants and cattle. (See table 5).

Table 5

**Average production per hectare of main crops for years 1989-1997
(quintals per hectare)**

Crops	YEARS					
	1989	1990	Average 1991-1995	1995	1996	1997
Cereals and vegetables, of which:	41	34.00	30.40	28.70	22.10	33.30
Wheat	40	39.40	32.70	32.70	20.60	32.80
Burley	36	36.40	29.20	27.20	14.10	22.30
Maize	50	34.20	33.10	29.70	29.00	39.80
vegetables-bean	18	13.40	13.90	10.20	7.10	13.20
Sunflower	22	18.80	13.70	14.20	14.00	10.10
Soy (beans)	14	9.00	10.40	8.50	9.90	11.80
Sugar beet	420	291.00	241.00	231.00	228.00	246.60
Tobacco	19	20.60	15.80	13.60	11.40	13.70
Potato	110	72.00	74.50	68.00	56.60	63.20
Vegetables	152	157.00	97.10	76.00	58.10	59.20
Fruits and fruit shrubs	80.2	59.2	42.1	36.7	33.9	62.4
Vineyards	58.1	53.8	47.3	49.6	45	18

The productivity of agricultural cattle and poultry diminished considerably. If in 1990 the milk production per cow was 3975 kg a year while in 1997 it only reached 1752 kg per year. The daily increase in weight of the horned cattle within the same period went down from 515 to 181 grams, and of porcine cattle respectively from 304 to 189 grams.

An extremely negative influence on the economic performances of agriculture had the drastic diminution of areas under perennial plants. In 1990 the vineyards occupied an area of 179.000 ha. but in 1997 – only 117.000 ha., the orchards in 1990 – 234.000 ha. while in 1997 –

191.000 ha. Substantially diminished the areas planted with legumes and tobacco, but grew up the areas of cereal and bean crops: from 747.000 ha. in 1990 to 1066.000 in 1997, or by 43%.

The number of horned cattle went down from 1061.000 heads in 1990 to 551.000 in 1997, porcines – from 1850.000 to 798.000 heads, poultry – from 24625.000 heads to 13446.000.

Increase of cost price for the agricultural production, determined by the growth of electric power agents, mineral fertilizers, means of plant and animal protection, agricultural techniques, and other production means took place simultaneously with a less notable increase of prices for agricultural products. This phenomenon was called the “price scissors”. (See table 6).

Table 6

Price scissors

Indicators	1995	1996	1997
1. Realization prices index of agricultural production by enterprise (1994-100%)	117	126	99
2. Wholesale prices index of industrial production (1994-100%)	154	132	120
3. Price scissors (1:2)	76	95	82.5

Lowering of plant and cattle production, the “price scissors” phenomenon has negatively influenced the production profitableness of main raw materials in agriculture (See table 7).

Table 7**Profitableness level of realized production by agricultural enterprises (%)**

Name of production	1992	1993	1994	1995	1996	1997
Vegetal production	86.7	77.0	29.6	8.8	1.4	
• Cereals (inclusive maize)	240.3	258.5	112.0	59.4	31.7	37.4
• Sugar beet (industrial)	100.1	56.3	17.0	11.0	-5.0	-2.7
• Sunflower seeds	438.0	254.7	131.0	74.0	17.8	-7.1
• Vegetables	28.4	9.6	7.8	-34.2	-40.5	-38.5
• Fruits and berries	51.1	31.2	17.3	-11.7	-11.9	-8.9
• Grapes	79.7	60.3	5.1	0.5	4.4	-35.9
Cattle production	4.0	-5.6	-12.2	-33.0	-39.4	
• Cattle and poultry	12.7	13.6	-5.7	-33.1	-42.5	-52.0
• Milk and milk production (equivalent in milk)	-4.9	-31.3	-27.4	-40.7	-48.4	-44.1
• Eggs	-43.3	-11.2	-2.7	-9.7	0.7	

Reduction of profitableness of agricultural production accompanied by the diminution of areas with perennial plants, which are the most efficient economic branches in Moldovan agriculture have contributed to the substantial worsening of financial situation in the rural sector. (See table 8).

Table 8**Financial situation in agricultural sector (millions lei)**

	31/12/1995	31/12/1996	31/12/1997
Aseets			
Fixed means	6509,0	10191,1	12391,0

Stocks	1198,4	1310,5	1239,7
Debit accounts and other current actives	706,7	827,9	797,7
Passive			
Capital	6910,5	10537,3	12980,7
Debts on long-terms	65,0	103,1	113,8
Debts on short-terms	1605,1	2287,7	2112,1
TOTAL BALANCE	8580,6	12928,1	15206,6
Annual sales	2368,0	2480,9	2488,3
Inflation rate	24%	15%	12%
Sales fitted at inflation rate	2650,0	2667,0	2637,6
Current assets reported at current debts	1,19	0,93	0,96
Total debt reported at fitted sales at inflation	0,63	0,90	0,84
Fitted sales at inflation reported at total actives	0,31	0,21	0,17

Table no. 8 shows that agricultural enterprises face a shortage of circulating means, being forced to make them up with the help of credits. All that has brought to a substantial increase of short-term credit debts in 1997 – by 32% as against 1995.

It should be mentioned that investments in the fixed capital were minimized. Increase in the volume of fixed means by 2 times in 1997 in comparison with 1995, can be motivated not by investment growth but by the indexing and reevaluation of funds in 1996 and 1997. In reality, within the period 1990 until now, agriculture has undergone a break up and moral and physical ageing of the fixed funds, perennial plants areas inclusively.

3.2. Evolution of main agro-industrial sub-complexes and its impact on social sphere

Crisis deepening in the agrarian sector – the producer of raw material for the processing industry and sphere that provides jobs and incomes to the rural population, has negatively influenced both the social and economic situation in the rural sector. It also influenced the financial situation of industrial processing enterprises finally resulting in a substantial reduction of the volume of finished food products (roughly by 50% in 1997 as against 1990).

During the last years the system of agricultural production has suffered essential structural changes, which ended in a substantial reduction of areas under perennial crops/plants (vineyards and orchards), technical crops (tobacco, sugar beet), and legumes (see compartment 3.1.2) and

increase on their account of surfaces under cereal crops. These changes have caused a drastic decrease of the capacity of agro-industrial complex to assure: a) jobs and incomes for the rural population; b) incomes and investment sources for the agricultural enterprises, c) contributions to the local and central budgets. As a result, the economic capacities of the population, agricultural enterprises, and local and central budgets to solve or take part in solving the social problems of the rural community reached the minimum level.

In this context, as a confirmation we will bring the analysis of the main agro-industrial sub-complexes of the Republic of Moldova.

The most important 6 sub-complexes of the agro-industrial complex are: 1) cereals-baking industry; 2) sugar beet-sugar; 3) sunflower seeds-oil; fruits and vegetable-cans; 5) wine-wine industry; 6) tobacco-tobacco industry. The above-mentioned sub-complexes differ by:

I. Incomes per agricultural plot: the incomes in the cereal- baking industry and sunflower seeds-oil sub-complexes are 4 times lower than in the fruits and vegetable-cans sub-complex, 5 times lower than in the wine-wine industry sub-complex and 10 times lower than in the tobacco-tobacco industry sub-complex.

II. Profits per agricultural plot: the cereal- baking industry sub-complex is exceeded in this respect: a) 8,2 times by the vegetable-cans sub-complex; b) 14,8 times by the wine-wine industry sub-complex; c) 21 times by the tobacco-tobacco production sub-complex.

III. Budget allocations per agricultural plot: the cereal- baking industry sub-complex is exceeded in this case: a) 7,1 times by the vegetable-cans sub-complex; b) 13,9 times by the wine-wine industry sub-complex; c) 19,3 times by the tobacco-tobacco production sub-complex.

IV. Labor force needs: cereals and sunflower plots, occupying together 73,5% (over $\frac{3}{4}$) of the total area of the 6 sub-complexes, cover only 7,1% of the labor force potential necessary to cultivate the respective crops, while the tobacco, legumes, orchards and vineyards, occupying only 20,1% of areas, need 90,3% of the total of manpower. Consequently, the last 4 crops will use 46 times more labor force than the first 2.

The negative effect of the share decrease of sub-complexes based on production and processing of raw material, which originates in cultivating intensive crops, will worsen the situation of all participants in the process of reproduction, distribution and utilization of results:

- the village will suffer a substantial decrease of budget incomes (for instance, vineyards, occupying only 3,6% of the total agricultural land, the wine-vineyards complex assures 25,5% of allocations in the agro-industrial complex budget);

- the employees will be threatened by the diminution of employment possibilities (according to the estimated data, by 2010 the real needs of manpower in agriculture will reach 250-300 thousand people, which is 2-3 times less than the number of nowadays employees, unemployment expanding to an alarming size);
- employers will face a decrease of profits and that will shorten the investment possibilities.

Alongside with the severing of **economic, financial and social** problems mentioned above, lowering of areas under intensive crops, especially perennial plants will aggravate such urgent issues of the Republic of Moldova as for instance the ecological and power ones.

In Moldova many agricultural areas are placed on slopes under high erosion risk for the field crops, especially for the weeding ones, which during the last years occupy 60% of their surface. The reduction of vineyards and orchards areas on these slopes will intensify the erosion processes, which in Moldova (due to the uneven character of the land, torrential rain, excessive share of hoeing crops under rotation, high quota of cultivated land as against the total surface of the country) are the most intensive in Europe.

The problems of efficient use of power resources in the agro-industrial complex are of great importance, especially if to take into account that Moldova imports 98% of the consumed power and the international experience of the last 25-30 years, which proved that competitiveness of modern economies depend to the highest extent on the intensity of reduction of national consume of power per GDP unit. It is sufficient to remind that at the beginning of 90s the Republic of Moldova used to consume 8 times more power than the developed countries. (at that time, because of the old technologies and techniques, which are in a much worse condition at present, Moldova used 2 times more power per ha. than England, Denmark, Germany; 3 times more than France, Hungary; 5 times more than USA; 13 times than Australia and Canada). In 1997 Moldova used 1,5 times more power per GDP unit than in 1990. Coming back to the comparison between the wine-vineyards sub-complex and other agro-industrial sectors we will mention that per each invested leu in wine-vineyards sub-complex we use 3 times less energy than the average in the agro-industrial complex, and 5,7 times less than in the cereals- baking industry sub-complex.

The necessity to fight against the excessive erosion and the costs of supplementary consumed power will require important sums from the investment means, which could have been directed to the solution of social problems, development of new jobs, implementation of advanced technologies and techniques.

3.3 Estate of reforms in agriculture

The crisis of rural economy was caused by the failure of the collectivist agriculture, determined at its turn, by the anti-economy policy of the ex-totalitarian regime. The last one

materialized in the reduced volume of investments, non-stimulating prices for the acquired agricultural products, excessive centralization of production plans. The direct effects of this policy of rural economy pauperization resulted in financial and social-human unbalances.

Until 1990, the majority (70%) of agricultural agents used to be kolkhozes (collective husbandry farms) and sovkhozes (state farms) – 20%. Within 1992 – 1997 over 95% of collective farms took the decision to reorganize in accordance with the policy of transition to the market economy.

The speed of formal reorganization accelerated in 1996-1997. Until 1997, the majority of kolkhozes and sovkhozes were registered as agricultural cooperatives and closed-type (with a fix number of shareholders) joined stock companies. Based on non-commercializing shares, held by the members, and not on individually owned land and patrimony, these new juridical forms differ little from the former collective farms. Farmers associations represent 10% of the total number of agricultural enterprises, being a new organizational form where the land and patrimony are under the control of the members of associations.

The reduction of the areas' size and number of employees accompanied the change of the average size of collective farms. The diminution of agricultural units sizes happened because of the brake up of big farms into smaller ones and separation of independent owners/farmers from the big collective farms.

In the Republic of Moldova over 1 million of rural inhabitants have the right to the equivalent land share and value share of the former collective farms, of which only 16% got the land in kind.

At present over 1000 farms of different types operate in the republic, a number that is roughly equal to the number of former kolkhozes and sovkhozes. Until 1997 there have been created only 124 peasant husbandry farms with a total number of 13.000 members, which constitutes 20% of the total number of registered private enterprises.

3.4. Natural capital of agriculture and environment state

3.4.1. Land resources

The landed resources are the main natural riches of the Republic of Moldova. In connection with the intensification of the human pressing on environment, the protection, improvement, and sustainable utilization of land resources becomes a priority amongst the strategic objectives of the state policy.

The quota of cultivated land is inadmissible high – 64,4% of the total area of land fund or 85,3% of the area of agricultural areas. This makes impossible the maintenance of an ecological equilibrium between the natural and human ecosystems and leads to the degradation of the soil cover of the bio-diversity.

The total area of land resources constitutes 3,384 million ha., out of which 2,55 million ha. are agricultural lands, 1,78 million ha. – arable land, and 370.000 ha. -forests.

Within the last 30 years the area of agricultural areas diminished with 120.000 ha., in great majority of cases as a result of soil degradation and an unregulated alienation of lands for social needs. We face a reduction of arable areas per capita, which according to the recent data accounts for 0,4 ha.

An important factor that intensifies the negative processes in the utilization of land resources is the incorrect organization and cultivation of agricultural land, insufficient fertilization, unsystematic and incorrect cultivation of soils, and their pollution.

The main types of degradation of our soils, which in Moldova constitute the main component of the natural capital of production in the rural economy and assure the living standards for the rural population, are as follows:

Water erosion is the main factor of soil degradation caused by the uneven/troubled relief, tremendous downpour, excessive cultivation, and exaggerated share of plots under hoeing crops. During the last 30 years the surface of eroded soils increased by 243.000 ha. The area of soils eroded within 1975-97 used to increase roughly by 8,4 thousand ha.

Alongside with the shallow water erosion quite common with Moldova is the deep-water erosion. During the last decades the steep areas increased 3 times. Indirectly, the erosion effects extend also on other spheres of human activity: sticking of ponds in the mud; pollution of hollow ground, underground and shallow waters with chemicals from slopes; abolishment of communication lines, hydro-technical and social constructions.

Deterioration of lands as a result of soil sliding. During the last 25 years, as a result of incorrect human activity, the area of soil sliding increased by 62,6 thousand ha., annually advancing with 2,5 thousand ha. the main factor of intensification of sliding process during these years was the unwise lay out of slopes, tree, bushes and protection strips clearing caused by the (electric) power crisis.

Within the last years the sliding processes intensified, causing mass demolition of living houses and other constructions.

Deterioration of soils as a result of allocation of lands under constructions, roads, ponds and a nonselective testing of fertility strata of the soil. During the period of 27 years 40,9 thousand ha. have been allocated for constructions, roads, ponds.

The main social, political, and economic reasons of soils' degradation in Moldova are the following:

- absence of a state policy on sustainable utilization of soils;
- implementation of land reforms on the basis of a weak Land Cadaster;
- allocation of land shares, within the privatization process without a preventive anti-erosion organization of village territory in accordance with the requirements and conditions caused by the land reform;

- land holders do not know the methods of rational management of private land property in conditions of market economy;
- lack of a set of laws to regulate the agricultural management on privatized land and general and special/individual programs of utilization, conservation, and amelioration of land resources.

The sustainable utilization of soils necessitates a permanent control over the remarked negative processes and carrying out of measures for their control and prevention.

3.4.2. Forest resources

The data from the Department of Statistics attest a total forest area of 380.000 ha. (according to the State Ecological Inspection it amounts to 317.000 ha.). The ecological role of the forest resources for the protection of water reservoirs and soil conservation is well known, but underestimated in reality. Lately, we face an annual forest cleaning that comes to 140-150 ha. Over 7000 ha. of forests were completely destroyed only last year. Considerably diminished also the areas of other categories of green plantations: parks, green zones, protective forest belts, etc. For instance the area of green plantations under the communal service administration decreased by 1600 ha.

In 1996 tree planting in the state forest fund decreased by 60%, while the lands under cleaning increased by 50%. No new protective forest belts have been planted; on the contrary 40% of the old ones were destroyed.

There are a number of additional factors that affect more and more our forests:

- fuel crisis that leads to an ill-regulated cleaning of forests. Starting with 1990 the official reports point to an alarming increase of illicit cutting. Unless we solve the fuel problem, forests will have to suffer.
- the regime of forest administration in the Republic of Moldova does not allow exploitation over the sanitary standards (about 130.000 m³ annually). The volume of the forest clearing increased 3 times reaching the figure of 400.000 m³.

According to the official data, the forest areas constitute only 9% of the territory of the Republic. There is a plan of enlarging these areas according to which this quota shall increase by 13% in 2000. Although this is a lower percentage in comparison with other European countries with similar population density, unless a serious reorganization and management of the forest fund is assured, the aim will not be attained.

3.4.3. Water resources

The Republic of Moldova is not rich in shallow water resources, the water surface accounting for only 15.000 ha and their volume – 210 mill. m³. Supply with good quality water within the course of a year amounts to 170 m³, which is 97 times less than in Russia.

The water of small rivers that cross the rural areas is of bad quality due to excessive pollution. These rivers need a radical ecological reconstruction and lay out.

Only 50% of the existing deep/underground water can be used for drinking purposes. They contain a lot of salts and other substances. In some micro zones of Moldova, especially in the South, the population is short of clean drinkable water.

Being located in a dry zone, the agriculture of the Republic of Moldova greatly depends on irrigation, as a mean of fundamental regulation of the humidity regime of the soil. According to centralized cadastral form, since 1997, the total area of agricultural land constitutes 307,1 thousand ha. For the time being, the irrigation network and pump stations are maintained on the approximate area of 85 thousand ha. Given a bad management and financial crises, the irrigation is not applied on the biggest part of the lands, where they have necessary technical means.

In the period of exploitation, irrigated soil, as a rule, suffers negative modifications: deterioration of the structure and pressure of the arable layer and subjacent, creation of salt-fields, rising the level of first waters and their mineralization etc.

Irrigation technologies applicable in the Republic of Moldova lead to destruction of aquatic resources. Applied in past, given the lack of complete hydraulic information, evaluation of the volume that may be extracted from aqua-spheres led to a super-exploitation of the under-ground waters. Cost of reparation works, necessary today, will be incomparably higher than the lost precaution measures.

Another important issue is the quality of aquatic resources. According to the estimations made, in rural zones of the Republic more than 60% of the population use first waters for food needs.

Daily supply of water through centralized systems in 1996 constituted 1325 liters for a person in town and only 23 liters - in rural area. A big part of the population from villages and towns generally have no access to the centralized system of water supply and use wells or springs, which not always correspond to the standards. In rural areas less than 1% of localities have sewer, the fact that considerably affects the quality of the drinking water and sanitation situation in villages.

The analyses of quality of the under-ground waters, undertaken in 1997, in rural areas of the country, depending on the way the soil is managed, shows that the highest rate of the most

polluted wells are in villages and in their surroundings, and the average concentration of pollutants in the wells of villages is significantly high.

First waters of good quality can be found in high zones and in upper villages. The most important pollutants (components of nitrogen, microbe pollution) are concentrated in villages, being in relation to the activities undertaken by private farms. The main sources of pollution are non-filtered waters on the surface of the soil. Pollutants caused by agricultural activities are less important, given the reduced use of mineral and organic fertilizers, as well as pesticides, also a number of animals of livestock sector.

Monitoring of the water quality in rural areas shows that the average level of hardness, mineralization, sulfas, nitrates and selenium exceed the standards of the World Health Organization. Microbiological pollution of wells is extremely strong in villages. It represents a real danger of new infections among the rural population (diarrhea, cholera, hepatitis).

Water provision systems do not correspond to the communal necessities. Lands surrounding villages are intensively cultivated, which leads to the formation of a big quantity of deserts. Wastes of the organic and non-organic nature are deposited within the areas of the farms or not covered holes. Undertaking of measures regarding the isolation of wastes can have a positive impact on the quality of under-ground waters.

The problem of drinking water and those for irrigation remains one of the most important in the environmental protection and provision of vital needs for rural population.

IV. SOCIAL ASPECT OF RURAL DEVELOPMENT

4.1 School and pre-school education

For a country with limited important natural resources, education in the Republic of Moldova constitutes an evident source of accumulation of human capital. Clear discrepancies are pointed out in this chapter between urban and rural areas.

Education in rural environment can be characterized as being in acute crises. Budget allotments cover only 30-40% from the necessary needs. The average wages of the didactic staff are 18 % below the average of the national economy. And there are delays in salary payments. Technical - material equipment of educational institutions is depreciated and does not correspond to the new requirements. During the last years very little budget resources were allocated for resolving the above issue.

For the last 7 years, the number of didactic staff reduced by 45%, and the number of educational institutions of different levels reduced by 16%. The number of students attending schools, gymnasiums and lyceums reduced by 13%, and professional colleges - 42%. An incontestable proof of degradation of the rural educational system is the fact of alarming decreasing of the proportion of young people from rural environment, who do not succeed to pass the university entrance exams.

The premises and the equipment are seriously deteriorated. 9% need emergency renovation and 38% - major repairs.

Rural school faces specific difficulties in provision with didactic equipment. For the last five years rural schools from the Republic did not purchase any supplies and equipment for provision of the educational process. At certain subjects, such as, chemistry, physics, biology, teachers do not have possibility to apply the practical part of the educational programs. The most difficult issue - is providing to schools specialists of English, French, Romanian (localities in the South of Moldova), mathematics and computer science.

The working conditions become more aggravated given that the classes are not heated during the wintertime. Teachers from villages, beside their basic activity, are forced to engage in other activities to obtain other sources of income from such activities as agriculture, livestock breeding and trade. In 1997 the educational system required 3348 teachers and the biggest part of it was not fulfilled, especially in the rural sector. Annually, 2100-2300 teachers quit their jobs. In the result, the Ministry of Education is forced to accept the didactic load being 1,5 -2 times bigger than the normative one, especially in the Central and Southern part of the Republic. Under these circumstances, we cannot talk about a qualitative education. As a consequence, villages will lack specialists, in the event nothing is undertaken for resolving the created situation in present, in the event rural schools will not be provided with qualitative and constant didactic specialists.

From the MSIF database it can be stated that more than 10% from the rural schools need an emergency repair (out of the kindergartens - 8%). Other 35% of schools need repairs of different level (kindergarten - 21%), only 46% of the communes included in the poll evaluated the state of school as satisfactory (kindergarten - 52%), remaining being - unsatisfactory. Schools and kindergartens from the North and Center are in the worst conditions.

From the investigated cases, it can be inferred that the issues of concern remain - provision with water, heat, electricity in schools, hygienic maintenance of health groups.

The decline in the pre-school system is presented in Table 10, which leads to a conclusion that for the last 7 years the number of pre-school institutions dropped by 37%. The number of children attending these institutions dramatically reduced by 58%. The number of didactic staff engaged in this field of the educational sector reduced by 2 times.

Table 9

Principals indexes of educational system

	1990	1995	1996	1997
Number of permanent pre-school institutions	2322	1668	1581	1480

Number of positions in permanent preschool institutions, thousands	268	194	183	177
Number of children in permanent pre-school institutions, thousands	337	161	147	139
Didactic personnel for pre-school institutions, thousands	32	18	16	15

Primary, secondary education degraded too (Table 10). The school population decreased by about 14%.

Table 10

Principals indexes of education at all levels

	1985/86	1990/91	1995/96	1996/97
Total – institutions	1822	1837	1674	1696
School population, thousands	910,8	907,7	766,5	778,0
Pupils in schools, gymnasiums, lyceums, thousands	740,8	743,5	645,9	652,4
Pupils in secondary-professional educational institutions, thousands	56,2	59,4	34,8	34,0
Pupils in collages, thousands	60,6	50,1	31,0	33,3
Students in higher educational institutions, thousands	53,2	54,7	54,8	58,3
Didactic personnel, thousands	61,2	67,6	57,1	55,3
Schools, gymnasiums, lyceums				
Quantity of day schools, gymnasiums and lyceums	1579	1635	1515	1530
Pupils, thousands	686,7	732,4	642,8	649,5
Didactic personnel, thousands	46,8	53,9	46,5	44,8

Main deficiencies of the rural education are the following:

- reduced access to pre-school education;
- insufficient help of children from vulnerable families;
- insufficient allocations for maintaining and development of technical-material and didactic equipment of educational system;
- unsatisfactory wages for the didactic staff;
- frequent cut off the electricity, unheated premises in cold seasons of the year;
- non-compliance of the educational system and professional preparation with the requirements of the labor market;
- lack of long-term prognosis of the necessity of the qualified labor force.

Main difficulties faced by the rural didactic staff are the following:

- difficult living conditions - besides their basic activity, teachers are forced to be engaged in agriculture, livestock and poultry breeding in order to maintain the existence of their families;
- starting with 1995, impossibility to subscribe for pedagogic newspapers and magazines, purchase books in teaching methodology;
- impossibility to fulfill the practical part of the educational programs (chemistry, biology, physics, etc)
- non-following by the local public authorities of the Government Resolution of the Republic of Moldova #726 from November 19, 1993 on Social Protection Measures for the employees from the public health, education and culture sectors.

Given the above, there is a conclusion that the main problem of the pre-school and school education, beside the necessity to undertake reforms in the given sectors, is substantive increase of directed investments for re-establishment of buildings, utility networks (provision with water, heat, telecommunication and electricity), technical-material and didactic equipment.

4.2. Health protection

During the last 7 years the rural environment of the Republic of Moldova registered a constant deterioration of the health state of the population with long-term effects. Being provoked by the extended multi-dimensional economic, social and psychological crises, it led to serious causes such as: sudden decrease of the living standards in the result of reduction of incomes, social insecurity, extension of social diseases and way of living, reduction of public allocations and personal expenses for health purposes.

Many of the causes of the reduced level of population's health in rural areas are caused by the existence of multiple risk factors, which are based on the way of living. The majority of the population does not have access to qualitative drinking water. The level of alcohol and tobacco products consumption is extremely high. Moldova has one of the biggest rates of traffic accidents and occupational accidents. Criminology has a negative impact on the society as well.

Decrease in birth rate and mass immigration of young people provokes a rapid ageing of the society. According to some estimations, the labor population as a component of the next generation will constitute not more than 30%.

Life span is one of the most decreased registered in Europe, about 10 years less than in the developed countries, having a fluctuating evolution during recent years, the average being 66 years. This index registers significant differences between women and men, between rural and urban.

General health indices are unfavorable: big mortality rate, which in 1997 reached the birth rate level, relatively high mortality at the productive/labor age (especially among men) and a high level of infant mortality.

General mortality increases and maintains at high ranks (10 – 11 deaths per 1000 persons), being definitely higher (40-45%) in the rural environment than in urban. Infant mortality varies between 18 and 22 deaths per 1000 persons. In its structure, 29-36% are caused by pre-birth circumstances, 20-24% - congenital malformations (diseases) and 22-27% respiratory illnesses.

General morbidity, second after mortality index of the population health maintains at a high level. The index maintains at the level of 39-40%, where it prevails (frequency of new and old diseases) at 68-70% of the population. The number of tuberculosis cases increases; the cases of psychological, drug-addiction are more often.

Table 11

Basis indicators of health assistance for years 1994 – 1997

Indicators	1994	1995	1996	1997
Annual average population, mil.	4,348	4,338	4,317	4,312
Birth rate per 1000 of population, persons	14,3	13	12	11,9
Mortality rate per 1000 of population	11,8	12,2	11,5	11,9
Natural increase rate	2,5	0,8	0,5	0
Expectancy of life at birth, years	66,1	65,8	66,7	66,6
Infant mortality rate per 10000 born children till 1 year	22,6	21,2	20,2	19,9
Maternal mortality rate	25,8	40,8	40,2	48,3
Number of hospitals per 100000 of population	7,7	7,7	7,5	6,8
Number of hospital beds per 10000 of population	122,2	122,2	121,4	116,4
Number of physicians per 10000 of population	40,1	39,6	39,9	40,2
Number of medium-level medical personnel per 10000 of population	108,3	103,9	99,6	97,7

Health-hygienic and epidemiological situation in the Republic of Moldova in 1997 continued to deteriorate. Parameters of drinking water pollution maintained at the high level. The share of inapplicable standards constituted about 40%. Pathogen germs were found, which constituted 7% of the total water tests.

During the last years the concentration of sulph – dioxide considerably unreleased in atmospheric air, given the increased number of vehicles and deterioration of their technical state.

A deplorable situation was created in the field of hygienic supervision of the process of storing, sale and application of pesticides and mineral fertilizers.

There is an increasing tendency in the chapter food hygiene, which speaks about a big share of food products being inapplicable to the hygienic norms through microbiological indices. The

share of tests of contaminated food with mycotoxins and food preservatives significantly increased during the last years (% from the total tests): toxic elements – 0,6; pesticides – 0,4; nitrates – 3,5; mycotoxins – 0,5; food preservatives – 6,6.

The situation in the health sector aggravates by the fact that the number of doctors has been constantly decreasing during the recent years (Table 12).

Table 12

Number of physicians and insurance of the population with them by some specialties

Specialties	1996, persons	1996, per 10000 of population	1997, persons	1997, per 10000 of population
total physicians	16199	37,5	16114	37,4
Therapeutic profile	4132	9,5	3997	9,3
Inclusive: therapists	2173	5,0	1946	4,5
infectionists	247	0,6	250	0,6
family doctor	95	0,2	197	0,5
Surgeons and traumatologists	1106	2,6	945	2,2
Pediatric profile	1903	4,4	1788	4,2
Obstetrists-gynecologists	1062	2,5	986	2,3
Oncologists	172	0,4	170	0,4
Otolaryngologists	246	0,6	230	0,5
Neuropathologists	469	1,1	416	1,0
Psychiatrists	322	0,7	306	0,7
Narcologists	112	0,2	120	0,3
Phthisiologists	251	0,6	246	0,6
Stomatologists and dentists	1694	3,9	1645	3,8

The number of medical staff is also in a constant decline (Table 13). Availability of this category of medical staff is 4,4 times less in rural areas than in urban ones, and the decrease is continuing now.

Table 13

**Number of medium-level health personnel
and their ratio insurance of the population with them**

	1993	1994	1995	1996	1997
• Number of total medium-level health personnel, thousands	46,67	45,21	42,91	41,07	40,03
• per 10 thousands inhabitants	107,2	104,0	99,0	95,1	93,0
• Number of total medium-level health personnel in urban areas, thousands	36,83	35,47	33,67	32,30	31,68
• per 10 thousands urban inhabitants	180,9	174,5	168,0	161,5	159,4
• Number of total medium-level health personnel in rural areas, thousands	9,84	9,74	9,23	8,77	8,35
• per 10 thousands rural inhabitants	42,5	42,1	39,6	37,7	36,0

Different zones of the Republic register lack of medical staff. Thus, 17 medical specialists are providing medical services for 10 thousand people in the South, 25 people - in the North, and 40 persons – in Chisinau.

The rural health system faces negative tendencies such as:

- reduced access to medical services;
- continuous deterioration of the quality of medical services from public sector given low funding, lack of financial interest of different category of medical staff;
- insufficient provision of curative institutions with medical equipment and test medicines;
- non-coordinated structure of medical services, predomination of curative services in comparison to preventive and rehabilitation services;
- substantive reduction of the number of curative institutions, especially of sanitation stations: from 701 in 1990 to 278 in 1997;
- limited dimensions of private sector.

One of the main weak points of the rural medical system is the high level of physical and moral deterioration of the medical equipment, as well as premises. Thus, about 10% out of the buildings of medical institutions need urgent repair and about 40% - need major repair.

Conclusions made in the result of analyses of the rural health system are similar to those made for the education system and namely: the main problem of development of this branch in the nearest future is substantial increase of directed investments for renovation of the buildings, utility networks (provision with water, heat, telecommunications and electricity), technical-material equipment and preventive activities.

4.3. Energy and Communication networks, gas and fuel provision

4.3.1 Providing electricity to communes

The evaluated rural sector points out almost a complete provision with electricity (95% of the needs). Basically, villages are supplied with electricity, except for some neighborhoods where new families have just built their houses. According to MSIF database, given the financial deficiencies of the rural consumers, the quality and the duration of services on electric energy provision continuously suffered.

Frequent and long cuts of electricity have an extremely negative impact on health protection and education sectors, as well as on culture, information, etc. sectors. Electricity cuts resulted in lack of heat of the premises, given the fact that the respective systems, in the majority of cases, function on the basis of hot water circulation pumped by electric pumps.

Frequent cuts of electric networks in the rural sector do not imply any economic or administrative responsibilities for distributors. Provision with electricity to villages usually cuts on peak hours, meaning at the end of the day, when the light and functioning of the house electric appliances is most needed. Situation aggravates with the deterioration of the distribution network. This fact has a negative impact on communication possibilities, education and cultural development in villages. The impossibility of the state to fund this socially vulnerable category of the population benefits the development of poverty in the rural environment.

4.3.2. Supply with natural gas and fuel

Gas provision is another important issue in all regions of Moldova, but mostly in villages. There are few gasified villages. Level of supply with gas constitutes only 8,7% (compared to 89,5% in towns). There are designs on construction of gas systems in almost all localities, but lack of financial resources is the main obstacle for the implementation of the project. Resolving of these problems would considerably improve the level of living standards of the population and would ameliorate the ecological situation in all regions of Moldova. High prices for gas and coal, which exceed world prices, mislead the population and other consumers in choice of the type of fuel or energy. Thus, consumption of wood and organic remains increased by 7 times in the last 7 years. Woods are rapidly cut during winter time in order to be used for heating, which provoke serious ecological problems, inclusively by the intensification of the erosion processes of the soils and land slides.

It is clear that the installation of gas systems and connecting them to pumping stations of the localities would require considerable financial resources, which at present, are in charge of the local

public authorities. Even when the gas pipe is installed in some of the localities, rural population has to pay the cost for connection to the gas system (about 2,000.00 – 3,000.00 lei for one person). They cannot afford these expenses.

Lack of different sources of energy (coal, wood, electricity) makes the natural gas be one of the most important sources. It is sufficient to mention that the quantity of natural gas imported in the Republic of Moldova in 1997 constituted only 53,7% from the volume imported in 1990, coal – 6,5%. This reduction of quantities for imported energy resources had a serious impact on rural population, which has a low level of income compared to the urban population.

4.3.3 Roads

The quality of roads reflects to great extent the economic situation of a country. Technically overloaded roads correlate with the proportion of economic decline. Public roads network is owned by the State. Density of auto roads is 0,31 km/km² – below the level of West-European countries compared to square km and 1000 inhabitants. Only 62% from the total length of public roads have modern coverage, others being made of not processed stone with asphalt or soil. Technical situation of the public roads seriously deteriorated during the recent years. Thus, 2/3 from the total length of the roads constitutes those with exceeded term of use. Intensification of road traffic on the national roads aggravates the situation, increasing the high rate of accidents.

The state of rural roads notes a lower quality in comparison to the national level. In the majority of villages, the main road is covered with asphalt and some others with stone. In general, rural roads are soil roads and when it rains or in wintertime, the roads are not accessible. According to MSIF database, it can be inferred that about 33% of the total rural roads are in a deplorable situation, unsatisfactory – 28%, only 37% - satisfactory. There was no case when the quality of roads could be evaluated as good. MSIF data confirm that the general and common evaluation of the quality of national roads is low. Except the main road of the village, which is covered with asphalt, in the form of pressed stones, other streets are in the majority of cases made of soil.

Since the Republic of Moldova proclaimed its independence, given the economic crises and organizational difficulties, the quality of roads deteriorated even more. The current works of maintenance, executed by specialized enterprises, for asphalt roads, as well as for those covered with stones, were postponed or occurred rarely. The existing tradition until 1990s, according to which village authorities had to take care of the roads, is no longer in force. In the event there are no sources to maintain the internal and inter-communal roads, then the communication means in rural areas will remain in continuing drop. It is a well – known fact, in the era of information technologies, progress gets slower where there are no good roads. That is why, before restructuring

the roads, we should identify and use all the possibilities for maintaining the quality of roads in rural areas, at least not admitting the deterioration of the existing roads.

4.3.4. Information

In context of information of the rural sector, a separate issue constitutes the broadcasting of radio and TV channels. In 1997 approximately 98% of the rural population had access to the TV channels of the national TV, 92% - had two programs and only 82% - three TV channels. The radio wire network practically does not work now; the radio is working only through transistor or radio connected to the electrical outlet. Out from the MSIF evaluations, the level of equipment with the radio in rural areas varies from 85% to 98%.

After '90 the written press registered a continuous decline. Given the decline in the living standards, the subscription for newspapers becomes a luxury, especially for families from rural areas. Since 1995 subscription for newspapers and magazines registers a stable tendency of diminishing. Starting with 1995 the teachers from rural areas had no possibility to subscribe for pedagogical newspapers and magazines.

V. MAIN NECESSITIES OF RURAL COMMUNES

As a result of the social-economic analyses of the rural sector in the Republic of Moldova, carried by the present report, there were identified vital and urgent necessities for re-establishing and amelioration of the situation in the social-economic sphere of rural areas of Moldova. Solution of social problems, according to the concept of sustainable development (generally accepted concept by the international community as a philosophy for development in XXI century), is an integral part of resolving of economic and ecological problems. That is why the main needs of rural communities reveal social, economic and ecological aspects, which are inter-dependent. These needs, classified according to their priority are the following:

1. Renovation, re-establishing and maintenance in functional state of schools and pre-school institutions, improvement of technical-material and didactic equipment. These objectives have been given an exceptional priority, due to the fact that education, pursuant to the legislation in force in the Republic of Moldova, is declared national priority, taking into consideration the transition to market economy, democracy and a society of information-advertising type. First of all, a radical approach towards the way of thinking, knowledge, capacity of behavior, ethics, rights and responsibilities.

2. Amelioration of the quality of medical services, especially through the restoration and reconstruction of the respective institutions, improvement of the technical-material foundation for

the medical service. This is a vital need and could be explained by the fact that during the last decade the rural sector of Moldova registered a sharp deterioration in terms of population's health with long lasting effects.

3. Supply of the rural sector, especially of social subjects, with natural gas, connecting them to the main gas pipelines and construction of inter-municipal networks. If we do not solve the gas problem, the forest clearing will continue, the power crisis will deepen and that will affect the social situation, economic activities and health of people.

4. Supply with water fit to drink, by repairing the aqueduct systems, because practically the whole rural population uses the well water with a high degree of organic and chemical waste pollution.

5. Construction, reparation and maintenance of intra and extra-municipal roads' networks, because their quality do not meet the international standards and are under permanent deterioration.

6. Protection measures against the land sliding and erosion and ecological laying out of terrains, especially taking into account the necessity to fight against the environment pollution. The importance of these measures is determined by the fact that soils are the most valuable property of the nation and the overexploitation of natural resources within the last years has led to a considerable reduction of biodiversity and to a substantial deterioration of the productive potential of the natural capital.

7. Supply with technical water necessary for the agricultural land irrigation because Moldova is situated in an arid zone, droughts being a common phenomenon and of such intensity that sometimes the harvest is totally destroyed, especially in the southern part of the Republic. Agricultural production can be guaranteed in all zones of the county only if the terrains are irrigated.

8. Construction and improvement of electrical power, communication and information networks for the rural settlements, because today the society development is impossible without an international (European and world) integration in terms of communication and information.

VI. Capacities of rural communities

As it has been proved by the respective chapters of the present report (2.2.2., 2.3.2., 2.4.1., 3.1.,3.2.) the financial and technical-material possibilities of the rural sector are absolutely insufficient for the solution of urgent social-economic problems faced by the majority of rural settlements.

Also lamentable is the state of mind of the population, which is demonstrated also by the chapter 2.5. of the sociological survey. The capacities of the population to solve the personal,

family issues and the problems of the community in which they live have been substantially deteriorated by the socialist education and way of life. In the administratively planned system before the Gorbachov's "perestroika" social life was centrally managed without the participation of citizens when adopting decisions and implementing them in practice. Thus people lack the spirit of initiative or co-participation, material inclusively, in the settlement of common issues of the village.

Tergiversation of reforms that resulted in ruining and disintegration of agricultural enterprises and big economic units, where could be possible the coalesce the communities, is one of the main causes of rural society disintegration and disappearance of the cohesion spirit common with Moldovan villages within the course of history. At the beginning is also the process of development/building of the non-governmental sector. Even if in some villages there are certain subdivisions of NGOs, such as associations of farmers, teachers, doctors, their activity is inefficient and sporadic, because the existing reality makes the population accept a surviving to the limit regime, when everybody is forced to solve the existing problems by himself.

The local public authorities did not learn the activity and management principles adequate to the standards of market economy and civil society, do not direct their efforts to the mobilization of the human, material and financial potential (even if it is an austere one) available for the solution of priority and urgent issues of communities.

In a great number of villages still there do exist production units, such as brigades for communal services, construction, reparation etc., with specialists of a satisfactory degree of professionalism and respective technical equipment (although the last one is very often physically and morally over worn).

The survey of technical-material, financial, organizational and psychological capacities shows that the amelioration of the social-economic situation in the rural sector requires additional investments, even if modest in size, accompanied by activities meant to mobilize the human potential existing in the rural sector.

Concept of the rural sustainable development

In order to assure a sustainable development of rural settlements it is necessary to considerably improve their living standards (ameliorate the housing fund, extend the commodities and communal services, increase the training and information level and the level of medical services, provide access to the national and universal cultural values, assure with up-to-date communication and transport means, provide an entertainment and clean environment, sufficient and qualitative food and drinking water sources, etc.).

In these conditions, our country needs a concept of individual development of the rural sector, which will take into consideration the national traditions and specifics, as well as the creative assimilation of lessons and experience of other countries, especially of those with rich

performances in conditions of market economy, taking into account the objectives of EU enlargement.

Elaboration and implementation of such a concept foresees:

- monitoring and selection of local and international models of sustainable development of rural communities and their adjustment to the specific conditions of transition to the market economy and sustainable human development;
- stating the objectives and priorities of the development of rural settlements, taking into account the necessity to establish structures with the production and service providing spheres, which would create new jobs, rationally utilize, protect, improve and regenerate the natural resources, increase substantially the incomes of the population;
- elaboration and implementation of special programs at the national level regarding the development of rural communities, in particular the infrastructure and public and private social-economic services that will improve the rural population wealth.
- stimulation by the local and central public authorities of agricultural and non-agricultural activities, which require a large volume of labor force as a means of fighting the rural unemployment
- stimulation of partnership among the public and private agents in order to assure a sustainable development of rural communities.

Implementation of these strategic plans of rural sector development requires considerable efforts and much time. At the first stage there should be resolved the most vital and urgent problems by bringing into being concrete macro and micro-projects, which would guarantee a maximal efficiency of the undertaken financial and organizational efforts. This objective will be achieved by the MSIF – an autonomous public institution meant to find out the priority needs of the rural communities in rehabilitation of social and economic infrastructure. MSIF tends to assure a maximal access to qualitative social services for the rural population in Moldova and to consolidate the capacities and potential of villages.