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Ukrainian Chernobyl National Programs Enhancement

*Analytical study**

Executive summary

The main purpose of the study is to help UNDP in Ukraine support government of Ukraine to enhance and implement National programs aimed at recovery and development of the territories affected by Chernobyl catastrophe. The study presents information and practical recommendations to revise the present strategy of mitigation the aftermath of the catastrophe and to support effective enhancement and implementation of a new strategy of social and economic rehabilitation and development of the Chernobyl affected territories instead.

The study reviews the past and present National programs of mitigation of consequences, their respective major areas of activities, financing, and implementation, as well as adequacy and efficiency of the strategies used in addressing the socio-economic problems that followed the catastrophe. Objective difficulties in implementing the National programs of mitigation the consequences are next discussed, following which the Complex National Program of Social and Economic Development of the Chernobyl Territories, presently under preparation, is assessed.

The first priorities in early handling the Chernobyl catastrophe related to the sealing off the area of greatest contamination, resettling of people from the severely contaminated zones, protecting population against the use of contaminated food, water, and air and against a spill over of such contamination, implementing a thorough system of medical surveillance, screening analysis, and treatment; and establishing a complex system of financial, medical, and social support for the approximately three million people defined as its 'victims'. Given the magnitude of the 1986 disaster and the long-term nature of radiation contamination and illness, it should come as no surprise that all these operations required extraordinary measures and massive humanitarian aid, and that their delivery in its early stages was in many ways a quasi-military operation. However, what must have been the only way of delivery the necessary assistance and of containment a nuclear explosion in the first period after the catastrophe, became a serious impediment to social and economic recovery and a source of social apathy and psychological and inter-personal traumas for many Chernobyl sufferers, Chernobyl resettles and their new neighbors.

The present 'top-down' paradigm of Chernobyl assistance system generated among many positive things also aid dependency, widespread social apathy and a 'Chernobyl victim' syndrome. Moreover, following the worst tradition of the Soviet central planning, with no respect for realism and setting unachievable long- and medium-term targets wherever short-run supply shortfalls are gravest, financially over ambitious targets have been set not only in each and every round of deciding priorities and targets of the Government of Ukraine's Chernobyl programs ever since 1991 but, moreover, the full volumes of assistance and privileges granted by laws, were reconfirmed by the Constitution of Ukraine. Its Articles 16

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and 22 taken together make benefits and privileges once granted by any law irrevocable, which opens way for only too easy but very effective political demagoguery, without any respect for financial constrains. Consequently, the vicious circle of inadequate means and irrevocable commitments offers no chances of effective overcoming not only of economic consequences of the Chernobyl catastrophe, but – no less important – its social consequences.

The study proposes to square this vicious circle through revising the present paradigm of strategy of assistance in such a way (and in line with the present UNDP *Chernobyl Recovery and Development Program, UKR/02/005*) as to assist affected people and communities to initiate their own recovery through organizing themselves into self-governing organizations to take the lead in planning, managing and implementing their own social, economic, and ecological rehabilitation and development. More specifically, the study puts forward the following measures that could help achieve shifting of the Chernobyl strategy paradigm:

First, considering that the Government Chernobyl programs presently under operation are based on completely outdated legislation which effectively deters even development of a concept paper of a new strategy for overcoming the consequences of Chernobyl catastrophe, a number of revisions of the present Chernobyl-related legislation is put forward. It must go beyond its harmonization with that in other areas, such as taxation, regional development, land use, environment protection, etc., and go in step with revisions in NPMs, should the latter continue, lest mutual consistency between the former and the latter is lost. Moreover, the new legal framework should be suitable for and compatible with the new strategy of social and economic rehabilitation and development of Chernobyl territories.

Consequently, revisions in the Law on Legal Regime of Chernobyl affected territories should account for improvement in the radiation position in the past 18 years and should therefore lift the present restrictions on economic and other activities. Revisions in the Law on the Status should help introduce a new and far better targeted system of social, medical and resettlement related assistance. Regarding economic environment that would encourage business operations and investments, legislation that presently applies to everywhere else in Ukraine but Chernobyl territories must apply to Chernobyl territories as well. Moreover special powers should be attributed to local governments there, at the expense of powers presently vested in central and/or oblast governments, especially in safeguarding the participatory nature of development and implementation of plans of area and local development. The same refers to more fiscal decentralization, the right of rayon's (and community) councils to impose local contributions, greater flexibility in the use of present legislation in force in Ukraine regarding special economic zones, territories of priority development, etc.

Second, the study emphasizes the need for sound information on levels of the present radiological contamination, as well as that of output produced there, whether marketed or produced for own use, and whether sold in the Chernobyl affected territories or outside them. This information must be reliable, sufficiently disaggregated, open to the public (and the media) scrutiny and supported by a close monitoring system. It should include increased involvement of Ukrainian and international experts and its undisputed reliability is a sine-qua-non condition for success in shifting the Chernobyl strategy priorities, in improvement of targeting of the assistance system to Chernobyl sufferers and for all economic recovery and development projects.

Third, the system of social assistance (medical and resettlement assistance too) should undergo not only improved targeting (far not accomplished yet) but – more importantly – a conceptual

redesigning. Considering the political space for limitation of the Chernobyl related social assistance, the study distinguishes between assistance linked to radiation overdose absorbed by individuals, and radiation intensity linked with territory. The former, once legitimacy of claims is reconfirmed and its total value is added to that of medical and resettlement related assistance, could become a subject of buy-up operations by the Treasury, at a discount, in all cases where individual Chernobyl sufferers were prepared to use the lump-sum down-payment of undisputable present and future claims for start-ups of their individual business. A parallel solution is also proposed regarding claims that relate to territorial privileges, as are measures that could help mitigate opposition against such contracts.

The study discusses also some technical issues related to who should legally be entitled to put forward such an offer on the part of the Treasury, what should be the discount between total volume of outstanding and future claims and the offer to buy them up (for a strictly defined purpose and under condition of surrendering any further claims in future), what should be the composition of the panel for interviewing individual sufferers and what sort of institutions would be responsible for establishing an environment that would encourage individual sufferers to positively respond to any such initiative, etc.

Next the study examines economic recovery schemes that could be applied in the Chernobyl affected territories. Instrument-wise they need to follow a standard menu of options for area and local (regional) development planning which is as much relevant to Chernobyl as to Ukraine as a whole: improved business environment and public governance (more transparency and less corruption), simplified business registration procedures, improved commercial and other judiciary operations, improved access to commercial finance, etc. Of specific importance for rehabilitation and development of Chernobyl territories the study finds three factors.

- The first is road, gas, water and other infrastructure. These are costs that no single business can sustain, certainly no small or medium sized that are to become a true engine of growth and employment. Lack of infrastructure is also impediment for new investments, whether Ukrainian or foreign.
- The second is sales markets. There are hardly any instances of successful restructuring and development strategies in their absence. It is also for this reason that introduction of the system of international product certification (which is not, of course, Chernobyl-specific, but which may be of far greater significance in the Chernobyl affected territories than elsewhere in Ukraine), is especially important, as are special measures for marketing output from territories that were in the past or continue to be radioactively contaminated.
- The third is the need, possibly more in Chernobyl than elsewhere in Ukraine, for Private-Public-Partnerships. It is important for participatory nature of any development projects and initiatives. It is important because it can offer better management and business oversight of these projects. It is important because it may offer additional financial and other inputs in an environment of finance and other resource shortage contrasted with large and urgent needs.

Regarding potential contribution of the donor community at large, and of UNDP especially, towards 'squaring the circle', and following the June 2002 *National Workshops on Chernobyl*, the study recommends to maintain policy development processes regarding Chernobyl recovery, and specifically the UNDP Chernobyl Program engagement in this work, towards:

- intensifying policy dialogue with concerned government agencies on macro and sector policy issues related to the elaboration of the new Chernobyl strategy concept paper;
- prioritizing the Chernobyl region within the UN Country Office in Ukraine when areas are being selected for pilot interventions, and developing and implementing special policy instruments that would be adjusted to special characteristics of the localities of intervention;
- enhancing the integration of UN activities and local and national government initiatives, particularly with those that support the implementation of the new strategy;
- strengthening local partnerships with donors and related resource mobilization and
- enhancing public relations activities to support policy dialogue and promote the new paradigm of UN strategy for Chernobyl recovery, and through a targeted public information campaign, launched especially at the regional and rayon levels, to help better understand and internalize the essence of the new strategy thereby reducing the potential political opposition against it.

1. Introduction

Prior to the explosion of the fourth energy block in the Chernobyl Nuclear Power Station (CHNPS), in April 1986, 274 thousand people, including 59.2 thousand children, lived in the Chernobyl area. The catastrophe released about 300 million Ci of radionuclides from the CHNPS's active zone into the environment and resulted in radioactive contamination of 53.4 thousand square kilometers of Ukrainian territory. This contamination affected 2,293 settlements and over 2.6 million people, including about one million children. 189 thousand hectares of arable land and 157 thousand hectares of forests were originally lost as a productive resource due to high contamination levels. Direct economic losses alone, including assets, infrastructure and natural resources lost as a result of contamination as well as the opportunity cost of plant operation and electricity generation, are estimated at \$10 billion.¹ Some 12 oblasts, and a total area of 4.6 million hectares of land were affected by radioactivity. By 2001, there were just 123 thousand persons residing in Chernobyl, including 21.2 thousand children². Some 3.1 million persons have been accorded special social assistance privileges (welfare payments, food allowances, and social pensions) as a result of the Chernobyl catastrophe, including 336,000 clean up workers, 1 million children and 1.7 million adults. On January 1, 2004 the total number of people who had the status of sufferers of the CHNPS explosion was 2,772,060,³ of which 755 thousands children. At the same time the numbers of the most heavily affected invalids constantly increases.⁴

Chernobyl aftermath, including radiological contamination, has resulted in immediate plant and farm closures, forced or voluntary resettlements and the initiation of radiological controls that restricted domestic sales and exports of local products from the area. All this has significantly undercut local and regional business in the Chernobyl affected areas of Ukraine and severely reduced opportunities for household income generation in rural communities, where food production and food processing are staple sources of income.

The economic situation worsened even more with the collapse of the Soviet Union in 1991. Economic transition saw the restructuring and closure of collective farms and enterprises across the Chernobyl region which dramatically increased unemployment and rural poverty. The migration of qualified young people from affected areas has hindered industrial recovery and left behind a higher percentage of elderly and pensioners than in Ukraine on average. Without adequate employment opportunities or entrepreneurial skills, many in the region have become dependent on the status as a Chernobyl victim to sustain their livelihoods. Several million people in the Chernobyl affected territories receive social welfare payments and special benefits. However, with inflation and budget constraints the value of these transfers is steadily declining.

The National Program of Mitigation of Consequences of the Chernobyl Catastrophe in the Years 1996-2000, and the presently under operation National Program of Mitigation of Consequences of the Chernobyl Catastrophe in the Years 2002-2005 and until 2010 (henceforth The National Program of Mitigation, 2002-2005), for various reasons have

¹ UNDP Chernobyl Program Report, Kyiv, 2002, p. 2.

² National Environmental Report 2001, p. 80.

³ Over UAH 158 thousands (i.e., 5.4 %) less than one year earlier.

⁴ See *The 2003 National Report on Technological and Natural Safety of Ukraine*, Ministry of Emergencies of Ukraine, Ministry of Environment of Ukraine and the National Academy of Sciences of Ukraine, Kiev 2004, p. 373.

proved unable to resolve the existing and emerging problems both in economic and social areas.

Launched in August 2002, the Chernobyl Recovery and Development Programme (CRDP) represents UNDP Ukraine's longstanding commitment to support the Government of Ukraine in its efforts to mitigate the lasting social, economic and ecological consequences of the Chernobyl catastrophe. Working directly with the Ministry of Emergencies of Ukraine, CRDP's overall support framework covers three areas including policy advice and development. This support is focused on building a participatory Chernobyl policy environment in which the recovery needs and development priorities of those whose lives were affected by Chernobyl are effectively targeted in national support programmes. Activities in this area include among others analyzing current human development conditions in the Chernobyl affected areas and providing impact assessments of current Chernobyl policies and programmes in Ukraine.

The present study seeks to help UNDP in Ukraine support government of Ukraine to enhance and implement national programs aimed at recovery and development of the territories affected by the Chernobyl catastrophe. Following a review of *The National Program of Mitigation, 2002-2005*, its main areas of activities, disbursement of funds, level of financing, and scale of target implementation are examined. Next, the adequacy and efficiency of the strategies used in addressing the socio-economic problems that followed the catastrophe, the objective difficulties in implementing of *The National Program of Mitigation, 2002-2005*, as well as the lost and potential opportunities in improvement of the situation in Chernobyl affected areas through implementing the relevant programs are assessed. Finally, the study presents some practical recommendations to support effective process of national Chernobyl related programs enhancement and implementation, especially in the area of socio-economic recovery and development.

2. Evolving Ukraine's priorities in confronting the Chernobyl catastrophe

Three stages of handling the CHNPS catastrophe are usually distinguished in the official Government of Ukraine (GOU) documents. In the first, beginning immediately after the accident until 1991, priority was given to containing the fire and preventing the horror of continued nuclear explosions, to evacuating the town of Prypyat and the neighboring settlements, to resettlement of the sufferers and providing medical and social protection for them. Cleaning up of nuclear contamination, measuring the resulting radioactivity levels and establishing a system of their control and monitoring among the sufferers, in food and other consumer products, on the affected land and in forested territories were also high priority, as were the efforts to more effectively seal off the reactor and its immediate surroundings, to prevent the danger of nuclear contamination through water, air and other spillovers, and to establish a system of social safety net for the victims of the disaster. Total expenses incurred in this period are estimated at USD 18.9 billion.⁵

In the second stage that covers the 1991-2000 period, while the efforts to effectively seal off the reactor and prevent the danger of nuclear water and air spillover contamination continued,

⁵ See *The National Program of Social and Economic Development of Territories that have been Adversely Affected by Radioactive Contamination following the CHNPS Catastrophe, and of Places of Compact Resettlements of Its Victims, for 2004-05 and until 2010*, Ministry of Emergencies, Kiev 2003, p. 2 (in Ukrainian).

priority was attached first and foremost to mitigation and minimization of the human consequences of the CHNPS catastrophe, and to responding to an unfolding public health crisis.⁶ Moreover, the present legal and institutional framework of handling the Chernobyl disaster was then largely established, the process of resettlement was continued, and the system of social and other benefits and compensations for the sufferers was put into operation. Total expenses in that period are estimated at USD 5.3 billion.

The present third stage, that started in 2000, and which by nature must be more long lasting, goes beyond minimizing human and other consequences of the catastrophe, and aims at social and economic recovery and sustainable human development of the affected population and territories. The new strategy under preparation stresses the need to put the Chernobyl affected communities and individuals on the road from welfare dependence to social and economic growth through mobilizing and supporting the people of the affected communities to organize themselves into self-governing structures to take the lead in planning, managing, and implementing their own social, economic, and ecological rehabilitation and development. The real start of this new strategy, however, proves difficult due to conflicting social and political vested interests as well as lack of well defined development priorities that would be effective in reaching their respective objectives on the one hand and would be compatible with limited financial means on the other hand.

As a matter of fact, the first two stages can be conveniently lumped together since they represent a phase of containment of nuclear disaster, and of providing social and humanitarian aid that followed. The 2002 UNDP and UNICEF joint report concludes that ‘whilst Chernobyl complex is now closed, the process of resettlement complete, but the demands made by the communities involved have scarcely diminished. Indeed, for many of those in the villages and settlements directly affected by the accident, the needs are as acute as ever.’⁷ The UNDP-UNICEF Report considers the period 1986 to 2001 as one single ‘emergency period’, characterized by urgent measures: (a) to make the reactor safe; (b) to resettle the population in immediate danger; and (c) to deliver humanitarian assistance to those in urgent need. The report then goes on to propose a second ten-year Recovery Phase ‘focused on enabling the individuals and communities affected by the disaster to enter fully into society by taking control of their own lives and acquiring the means for self-sufficiency through economic and human development’.⁸

3. Legal and institutional framework

Until 1990 there was no legal foundation for determining the status of the victims of the Chernobyl catastrophe, their rights, privileges and obligations, and no formal legal base for provision of humanitarian and social assistance. All decisions were made following the resolutions of the Central Committee of the CPSU, the Council of Ministers of the Soviet Union, orders of individual ministries or other organs of the Government of the Soviet Union. Most of these decisions and the relevant information were secret. In 1990, two subsequent

⁶ Since the accident, the incidence of thyroid gland pathology, cancer, respiratory diseases, and other health problems has substantially increased. Although eighteen years after the accident many radiation indicators have return to their norms and many others have significantly decreased, and the emergency period is over, a number of health (i.e. genetic mutation) and environmental (i.e. soil and water contamination) problems may constitute emergencies even for the next generation of Chernobyl survivors.

⁷ *The Human Consequences of the Chernobyl Nuclear Accident: A Strategy for Recovery*, A Report Commissioned by UNDP and UNICEF with the support of UN-OCHA and WHO, 6 February 2002, p. 14.

⁸ *Ibidem*, p. 15.

resolutions of the Council of Ministers of the Soviet Union laid foundations for measures aimed at improving medical and social assistance to the CHNPS clean up workers. Only in February 1991 the Law on the Status and Social Protection of the Population Who Suffered from the Chernobyl Catastrophe was passed by the Supreme Soviet of the Ukrainian Soviet Socialist Republic (Law No. 796-XII with subsequent revisions; henceforth the Law on the Status). Its fundamental provisions were subsequently endorsed by the 1996 Constitution of Ukraine that guaranteed the rights of protection of life and health for all CHNPS catastrophe victims at the expense of the State of Ukraine (Article 16). The Law on the Status was followed by extensive secondary legislation, of which the most important was possibly the revision of July 6, 1996 that introduced new classification of CHNPS disaster sufferers, largely expanding benefits and compensations for children and invalids.

The Law on the Status provides legal foundation of the present social assistance system for the Chernobyl sufferers. Its aim was to protect population affected by the accident and solve problems of medical and social nature that resulted from the radioactivity contamination. Article 9 of the law distinguishes two categories of sufferers: (i) those who were directly involved in extinguishing the explosion and immediate clean-up operation workers, (ii) population exposed to radioactive overdose following the catastrophe, children included. The law also defines several categories of Chernobyl sufferers:

- people evacuated from the exclusion zone, people resettled from the Zone of Unconditional (i.e. obligatory) resettlement, and people with the right for voluntary resettlement;
- people who on the day of the accident permanently resided in the territories of the Zone of Unconditional (obligatory) resettlement and in the Zone with the right for voluntary resettlement, or resided (as per date of January 1, 1993) in the territory of the Zone of Unconditional (obligatory) resettlement for no less than 2 years, or in the territory of the Zone with the right for voluntary resettlement for no less than 3 years, and were resettled or decided themselves to resettle from these territories;
- people who permanently resided, permanently worked, or permanently studied in the territories of the Zone of Unconditional (obligatory) resettlement and in the Zone with the right for voluntary resettlement, on condition that as per date of January 1, 1993 they resided, worked or studied in the territory of the Zone of unconditional (obligatory) resettlement for no less than 2 years, and in the territory of the Zone with the right for voluntary resettlement for no less than 3 years;
- people who permanently resided, worked or studied in the territory of the Zone of strict radiation control, on condition that as per date of January 1, 1993 they resided, worked or studied in these territories for no less than 4 years;
- people who worked since the moment of the accident until 1 July 1986 for no less than 14 days, or no less than 3 months during the period 1986-7 in especially harmful radiation conditions and who were engaged following Government decisions to execute tasks related to elimination of consequences of the Chernobyl catastrophe (list of such tasks was defined by the Government).

Moreover, Article 27 of the Law on the Status determines categories of children included into the 'sufferers of the Chernobyl catastrophe'.

This classification has rather a methodological meaning, however, and benefits and compensations to Chernobyl sufferers are granted following a different classification. Article 14 of the Law on the Status introduces four categories of beneficiaries, the first of which (Category 1) includes people who become invalids as a result of the Chernobyl catastrophe, the second (subdivided into two) includes clean-up workers in the 1986-7 period (category 2A)

and heavy sufferers (category 2B), the third (again subdivided into two) covers clean-up workers of the 19877-90 period (3A) and less heavy Chernobyl sufferers (3B), and category 4 covers all other sufferers.

Benefits cover healthcare payments, housing allowances, travel allowances, tax exemption, facilitated access to university education, compensations for lost property, compensations for damage to health, monthly allowances due to disability incurred because of the Chernobyl catastrophe, payments for radiation clean foodstuffs, etc. The Law on the Status together with other laws list all these benefits, and Part 4 of the Law groups them into also four categories: (i) general compensations and benefits to which all four are entitled; (ii) additional social protection of children (medical treatment, nutrition, and other benefits); (iii) “Habitation” social programs, and compensations for lost property; (iv) special pension arrangements and work facilities. These classifications and norms set in the Law on the Status have been so far the foundation of National Programs of Mitigation as well as of planned annual budget allocations. However, due to budget constrains, beginning since 1999 many of these privileges, primarily tax exemption, have been temporarily suspended.

Together with the Law on the Status, in 1991 the Law on Legal Regime of Territories Radioactively Contaminated Following the CHNPS Catastrophe (henceforth the Law on Legal Regime) was adopted. It defined radiation-affected zones and their classification, their safety standards, as well as work and living conditions in each category of zones, and economic and research activities that were permitted in them. Thereby legal foundations for future development of these zones were specified and, moreover, measures to be taken to lower radiation rates in these zones and to protect people’s health and environmental systems were guaranteed.

The Law on Legal Regime recognized territories of annual radiation doses of more than 1 mSv as contaminated zones. Its Articles 2 and 4 introduced the notions of ‘radiation-dangerous’ and ‘radiation-contaminated’ territories, and recognized neither living, nor manufacturing of agricultural or other products that couldn’t meet Ukrainian and international radiation standards in ‘radiation-dangerous’ territories acceptable. In ‘radiation-contaminated’ territories radiation protection and other measures were considered indispensable in order to prevent unlimited overspill of radiation contamination and next, to provide normal economic activity in these territories (for statistical account of individual categories of zones and their radiological and other characteristics, see Table 5 below).

The status of contaminated territories is regulated both by the Law on the Status and the Law on Legal Regime. The latter is of prohibitive nature. It defines what must not be done in each the zone category. Benefits are offered only by the Law on the Status.

Regarding benefits linked to the zone status (attributed by the Law on Legal Regime), they are of two types:

- (i) additional payments to compensate for reduced consumption of locally produced food, which in Zone 2 (i.e. zone of mandatory resettlement) amount to 50% of the average minimum wage in Ukraine, and in Zone 3 (i.e. zone of voluntary resettlement) 40% of the minimum wage (the Law on the Status, Art. 37); and
- (ii) additional payments for those who work in the territories of radioactive contamination, which in Zone 2 equals 3 minimum wages, and in Zone 3 it is two minimum wages (the Law on the Status, Art 39).

Similar additional payments apply to pensions and scholarships. Moreover, sufferers living in those zones are eligible for additional paid annual vacation days, and medical and social workers employed in there are eligible for additional payments.

Of other primary legislation, although it does not deal directly with the CHNPS catastrophe alone, clearly annual budget laws, the laws on Special Economic Zones and on Priority Development Areas, on local government and local government finances, etc. are all relevant.⁹ All in all, since 1990 until early 2004 over 800 various pieces of legislation have been enacted, all of which regulate different aspects of life of the CHNPS catastrophe affected people and territories.

A relatively new development, partly of legal and partly of institutional nature, is the establishment of Information Bank on the CHNPS Catastrophe Sufferers. Its aim is to provide central and local administration with reliable information on movements of sufferers, and on changes in their medical, social and radioactive assistance, following the transition from a system of general assistance to a system of targeted monetary assistance. The work on establishing the Information Bank continues for three years now, and as of early 2004 it covered 93 % of all eligible (i.e. 2.723 million of 2.930 eligible victims).

Institution-wise, following the Presidential Decree of 1996 (No. 1005/96, with later amendments introduced in the Presidential Decree of 2004, No. 283/2004), until mid-July 2004 the Ministry of Emergencies has been responsible for implementation of Government programs and priorities related to the CHNPS catastrophe. The 2004 Presidential Decree adjusted the competencies of the Ministry of Emergencies to a revised system of financing of Chernobyl related Government programs. Until 2004 financing of all these programs was channeled through the Ministry of Emergencies. However, the 2004 Budget Law of Ukraine decided that budget allocations that relate to social welfare and social compensations to the CHNPS catastrophe victims should be distributed through the Ministry of Labor and Social Policy and the Pension Fund respectively. This may be seen as a first step towards reallocating Chernobyl related State budget expenditures among several line ministries (of Health, Environment Protection, etc.), at the end only financing of catastrophe prevention and nuclear pollution spillover prevention being channeled through the Ministry of Emergencies. Such changes would make sense from the point of view of streamlining budget allocations according do competencies of line ministries provided, however, that the coordinating role of one single government agency is not undermined. The Presidential Decree of July 6, 2004 (no. 755/2004) shifts this role from the Ministry of Emergencies to a newly established Government Committee responsible for devising and overseeing all government programs and strategies related to mitigating the Chernobyl consequences.

4. Financing

When both, the Law on the Status and the Law on Legal Regime were adopted in 1991, they were thought to be financed from the central budget of the then Soviet Union, which in part

⁹ Considering continuous progress regarding primary legislation in Ukraine that regulates business environment, public and private investments, taxation, local government powers, etc., while the privileged legal solutions relevant for the Chernobyl complex have been embedded in the original Chernobyl related legislation that has not been revised in step with other respective legislation, with time what was an advantage some years ago may well be a disadvantage and serve counter-purpose now. From this point of view the former should be periodically revisited to at least keep in line with the latter.

explains some of its large spending commitments. With proclamation of independence of Ukraine in the same year, all these commitments were taken over by the State budget of Ukraine. However, from the very beginning the budget was unable to fully finance spending implied by the Chernobyl legal regulations in force, and the related GOU programs. For example, in 2000 full financing of the CHNPS catastrophe related expenses required UAH 7.5 billion,¹⁰ while total expenditures of the consolidated budget in that year were UAH 58.9 billion,¹¹ i.e. Chernobyl related expenditure commitments represented 12.7 % of the consolidated budget spending. All in all, total budget expenditure related to the CHNPS catastrophe in 1991-2000 is reported to have oscillated between 5-7 % of total budget expenditures.¹²

Reading of the annual budget laws of Ukraine since 1991 until 2004 does not give clear information, however, whether any Chernobyl related spending has been included in budget allocations for the Ministry of Defense, Ministry of Interior, Ministry of Health, etc. Moreover, Chernobyl related expenses have been financed also from local budgets. Therefore, the official data on total Chernobyl related spending of the consolidated budget must be considered as a 'low case' approximation only.

Since 2001 budget expenditures on overcoming the consequences of the Chernobyl catastrophe and providing social assistance to the Chernobyl sufferers are effected through 28 government 'sub-programs' (they number varies from year to year), which are enveloped in the *National Program for Mitigation*. Total budget spending for these sub-programs increased from UAH 1.8 billion in 2001 to UAH 1.9 billion in 2002, to nearly UAH 2.2 billion in 2003, and to UAH 2.7 billion planned for 2004 (a 26% rise over 2003). Social assistance outlays increased from UAH 0.9 billion in 2002 to nearly UAH 1.2 billion in 2002, to UAH 1.25 billion in 2003, and to UAH 1.3 billion planned in 2004, of which direct transfers to the sufferers increased from UAH 575 million in 2001 to UAH 723.4 million in 2002 and in 2003, to UAH 1124.8 in 2004¹³ (clearly signaling the approaching Presidential elections).

State budget expenditures on overcoming the consequences of the Chernobyl catastrophe are shown in Table 1, which also shows financial commitments implied in the *National Program for Mitigation for 2002-2005* ('NPM' entries in Table 1). Moreover, the 2004 budget allocations shown in Table 1 take into account the June 17, 2004 revisions of the 2004 Budget Law of Ukraine, which increased total outlays on overcoming the Chernobyl catastrophe by about UAH 375 million, of which nearly UAH 250 million on social assistance, over UAH 90 million on medical assistance and UAH 25 million on housing constructions for resettlement. Interestingly, over UAH 50 million of the budget spending increase is allocated to clearing budget arrears (originally only UAH 300 million was allocated for this purpose, of which an increase of about UAH 45 million for clearing arrears in monthly compensations for locally produced food.

¹⁰ See *The National Program of Mitigation, 1996-2000*, p. 6.

¹¹ See *The IMF Staff Report for Ukraine for 2003*, Washington, April 11, 2003, Table 6.

¹² See *The 2003 National Report on Technological and Natural Safety of Ukraine*, p. 366.

¹³ All data comes the Ministry of Finance website information of June 8, 2004 (<http://minfin.gov.ua>).

Table 1. Central government Chernobyl programs budget expenditures in 2002-4 (in UAH million)

Program	2002		2003		2004	
	Budget	NPM	Budget	NPM	Revised budget	NPM
Compensation for work on radioactively contaminated territories; retained salaries of sufferers shifted to less gainful occupation or resettled; payment of stipends and providing sufferers with extra vacations (leave)	126.6	193.9	126.6	224.5	261.7	255.9
Family compensation for free food for children of the Chernobyl sufferers	293.1	323.9	293.1	375.1	336.4	427.6
Monthly compensations for locally produced food and food subsidies for Chernobyl sufferers	289.2	384.4	289.2	445.2	659.9	507.5
Housing and heating fuel subsidies	44.6	44.6		51.7		58.9
Transport and communication services subsidies	64.9	64.9		75.2		85.7
Compensation for lost property and for costs of resettlement	8.0	8.0	8.0	9.3	38.0	10.6
Compensations for health injuries of invalids	6.4	8.7	6.4	10.0	16.4	11.4
Temporary disability payments	8.0	8.0	8.0	9.3	6.7	10.6
Public awareness campaign on Chernobyl consequences' liquidation	2.0	2.0	2.0	2.3	2.0	2.6
Provision of pensions for Chernobyl sufferers of the 1 st category	234.2	234.2	266.7	271.2	289.7	309.2
Provision of pensions for former CHNPS' employees following its closure					5.2	
Social assistance for former CHNPS' employees following its closure					2.2	
Provision of pensions for Chernobyl sufferers of the 2 nd , 3 rd , and 4 th categories, and for disabled pensioners living on contaminated zones	345.0	345.0	312.5	399.5	360.4	455.4
Death of bread-winner allowances and burying the Chernobyl victims subsidies	4.0	4.0	4.0	4.6	4.0	5.3
Clearing of payments arrears	200.0		200.0		353.1 ^a	
Reserve for unanticipated expenses related to liquidation of Chernobyl aftermath	5.5	5.5	1.5	6.4		7.3
Provision of auto-vehicles for Chernobyl category 1 st invalids	0.5	0.5	0.5	0.6	0.45	0.7
Subsidies to bank loans granted on concessionary terms before 1999 to Chernobyl sufferers	3.0	3.0	3.0	3.5	4.8	4.0
Subsidies to NGO "Chernobyl Union" and other NGOs for their operations related to social protection of Chernobyl sufferers	1.0	1.0	1.0	1.2	1.1	1.3
<i>Social Assistance together</i>	1636.0	1631.6	1522.5	1889.3	2342.05	2153.9
Medical services subsidies	60.9	65.4	60.9	75.73	60.9	86.34
Allowances for convalescent assistance to the sufferers	155.5	155.5	155.5	180.06	155.5	205.279
Complex medical and sanitary protection of the sufferers	54.4	54.4	28.4	62.98	43.4	71.8
<i>Medical Assistance together</i>	270.8	275.3	244.8	318.77	259.8	363.419
Housing construction for resettles	20.0	20.0	50.0	23.16	30.0	26.4
Implementation of the Chernobyl Construction Program	54.8	54.8	45.4	63.435	30 ^d	72.31
<i>Construction outlays related to resettlement, together</i>	74.8	74.8	95.4	86.595	60.0	98.71
Contribution of Ukraine to the Chernobyl Shelter Fund for the implementation of the SIP program	29.9	29.9		34.64	36.2	39.498
Construction of the 'Vector' complex	12	12	12	13.896	12	15.84
Radiological protection of people and territories; recovery of contaminated territories including	12	12	12	13.896	12	15.841

Chernobyl catastrophe research projects and support for information system on its consequences mitigation	10	10	10	11.58	10	13.02
Processing of radioactive wastes of non-nuclear nature and liquidation of radiation accidents	9.2		9.2		9.2	
Administration expenses of the Exclusion Zone and the Zone of obligatory resettlement	73.2 ^b	98.85	65.2	114.47	65.2	130.49
Maintenance of safety of the 'Shelter' object	26	26		30.108	248	34.108
<i>Nuclear Safety together</i>	99.1	188.75	108.4	218.59	392.6	248.797
Total outlays	2080.7	2170.5	1971.1	2513.3	3054.45	2864.8

a - In the 2004 budget this budget line does not appear separately but is disaggregated into UAH 94.2 million for clearing arrears in 'Compensation for work on radioactively contaminated territories...', UAU 30.3 million for clearing arrears in 'Family compensations for free food...', and UAH 228.6 million for clearing arrears in 'Monthly compensations for locally produced food...', which adds together to UAH 353.1 million for arrears clearing in 2004.

b - In the 2002 budget this entry includes UAH 26 million for the maintenance of the 'Shelter' object. However; as these outlays in the 2004 budget are separated into an extra budget heading (and they include also outlays on maintenance the safety of energy block and termination of their operation), for comparability reasons UAH 26 million in the 2002 budget was subtracted from 'Administratio0n expenses' and put into separate budget heading as in 2004 budget.

c - Plus UAH 0.7 million from special fund of privatization of uncompleted construction assets.

d - Of which 5.2 million is budgeted for the completion of the Radiation Therapy building of the Komisarenko Endocrinology and Metabolism Institute of the Academy of Medical Sciences.

Source: Annual Budget Laws of Ukraine in the years 2002-04, the Law on Revision of the 2004 Budget of Ukraine, of June 16, 2004 (No. 1801-IV), and *The 2003 National Report on Technological and Natural Safety of Ukraine*.

Most cost-intensive for the budget is the implementation of the Law on the Status. No wonder that the Ministry of Finance, considering the overarching requirement better to control budget spending and to maintain macroeconomic stabilization, for many years now has kept reducing the share of budget allocations related to social benefits and assistance granted under this law. Consequently the ratio of financial outlays required under the Law on the Status to actual budget allocations had fallen from 53.4 % in 1996 to 21.5 % in 2003, leading in turn to mounting payments arrears, from UAH 160.6 million in 1996 to UAH 685.4 million at the end of Q3 2003.¹⁴ According to *Information of the Ministry of Emergencies* of January 1, 2004, total arrears in payments of social compensation to the victims of CHNPS catastrophe was UAH 422.6 million.¹⁵ Although since 2001 the annual budgets allocate additional means for reduction of these arrears, with the ratios of obligatory financial commitments resulting from the present legislation in force to actual budget allocations, as shown in Table 2 below, full financing of those commitments seems for long to be outside the budget of Ukraine financing capacity.

¹⁴ See *The 2003 National Report on Technological and Natural Safety of Ukraine*, p. 369.

¹⁵ See *Additional Information on Overcoming the Effects of the Chernobyl Catastrophe*, prepared for Verhovna Rada's Debate on the Occasion of 18th Anniversary of the Chernobyl Disaster, Ministry of Emergencies, Kyiv 2004, p. 11.

Table 2. Financing of Government programs of mitigation of the Chernobyl catastrophe consequences, and of social protection of sufferers, in 1996-2003 (in UAH million)

Years	Allocations commitments under present legislation in force	Actual State budget allocations *	Allocations in % of commitments	Actual financing	Actual financing in % of budget allocations	Arrears at the beginning of the year
1996	3363.32	1794.56	53.4	1527.88	85.1	160.59
1997	5681.72	2513.00	44.2	1746.59	69.5	310.04
1998	4548.50	2606.00	57.3	1432.26	55.0	457.75
1999	6015.95	1746.80	29.0	1535.51	87.9	763.21
2000	7479.25	1812.89	24.2	1809.63	99.8	931.48
2001	8744.46	1843.99	21.1	1925.02*	104.4	786.4
2002	9957.80	2144.50	21.5	2002.80*	93.4	729.3**
2003	126567.40	1381.16	11.0	1381.16*	100.0	760.3***
2004	14872.50	1710.97	11.5			685.4

* These include allocations for clearing of budget arrears in social assistance payments. The respective allocations were UAH 123.5 million in 2001, UAH 200 million both in 2002 and 2003, and UAH 353.1 million in 2004.

** Of which UAH 634.6 million for social assistance.

*** Of which UAH 596.3 million for social assistance.

Source: *The 2003 National Report on Technological and Natural Safety of Ukraine*, Table 2, p. 372.

There are mounting problems with many budget allocations shown in Table 1, and not only because they have been too short to meet the needs, as shown in Table 2, but also because of political arbitrage in deciding which needs should be satisfied as first priority, because much of budget assistance has not been well addressed, and also because some of granted privileges cannot possibly be satisfied within the foreseeable budget limits over several years to come.

Payments for social assistance are far better transferred to beneficiaries than other allocations, although they too are subject to a 'political business cycle'.¹⁶ The same refers to medical assistance given to Chernobyl invalids and other sufferers. In both instances there is a problem of actual and potential corruption in granting the status of the beneficiary and in targeting of public assistance, and albeit recent improvements there is still room for expenditure rationalization.

Much more could also be done in the area of budget subsidies to convalescent vacations. In 2003, for instance, nearly 2.9 million people were entitled to fully or partly subsidized convalescent vacations, of which over 100 thousands of invalids, 285 thousands of 1986-87 clean up workers, and 844 thousands of children. Total expenses related to full rehabilitation of those entitled were estimated at UAH 3,762 million, but budget allocation was a mere 140 million, of which 111 million for children rehabilitation.¹⁷ Disregarding formal priority rules used for selection of the beneficiaries (group I invalids, invalids' children, orphaned children, children with chronic health conditions, etc.), clearly the discrepancy between the means and the needs leaves too much room for corrupt practices.

¹⁶ Lest arrears in Chernobyl related social transfers give rise to political protests in Verhovna Rada and to street demonstrations in Kiev. The term comes from a famous paper of Michal Kalecki, of 1943, although he used it in a slightly different political context.

¹⁷ See *The 2003 National Report on Technological and Natural Safety of Ukraine*, p. 377.

In the area of housing construction for resettles and the related communal infrastructure constructions, following the GOU Resolution No 333, of 30 December 1989, the first stage of the Chernobyl Construction Program aimed at building 2318 single family houses, 18 houses containing together 1052 flats, 17 pre-school facilities, 11 schools and 210 kilometers of gas-supply lines. These targets were nearly achieved which enabled the resettlement of 3.2 thousands of sufferers. The second stage aimed at resettlement of 14.7 thousands of sufferers from 66 places of compulsory resettlement (GOU Resolution No 228, of 23 September 1991). In the past 18 years, nearly 165 thousands people have been resettled into 204 places, of which 163 into places of compact resettlement. All these efforts notwithstanding, as of 1 January 2004 over 1.5 thousand families continued to live in the area of compulsory resettlement, of which 839 families wished to resettle (see Table 3). However, if families that live in territories of optional resettlement and that seek new accommodation (to which they are formally entitled) are also included, then as of January 1, 2003 the number of families in wait for resettlement was 24,856, of which 9,571 were families of Chernobyl invalids.¹⁸

Table 3. Resettlements from the zone of compulsory resettlement (in numbers of families)

Type of families	Total	Of which families from the regions			
		Zhytomyr	Kiev	Rivne	Chernigiv
Families planned to be resettled	18 147	8 480	8 721	721	228
Families resettled in 1990-2000	14 814	5 882	8 382	344	206
of which in the years:					
2001	45	40	5	-	-
2002	68	68	-	-	-
2003	52	52	-	-	-
Families living in the Zone of unconditional (compulsory) resettlement	1 503	967*	5	517**	12**
			-	-	-

* Of which 839 families need resettlement on their own request.

** Families that refused to be resettled.

Source: *The 2003 National Report on Technological and Natural Safety of Ukraine*, Table 3, p. 382.

Full meeting of these resettlement needs would require some UAH 1.7 billion, while budget allocations in the past few years cover about 1% of this sum and therefore realistic wait-time before the entitled families will be resettled is 8-10 years.¹⁹ Added to this is the problem of grossly inadequate supply of the accompanying communal infrastructure investments.

For examining the strategy choices in overcoming the consequences of the Chernobyl catastrophe, a more aggregated presentation of the Chernobyl related outlays will shed more light on the actual priorities in Government strategy to overcome the consequences of the Chernobyl catastrophe, and on potential room for their revisions. In the official Government documents, the Chernobyl related State budget allocations are usually grouped in the three broad categories:

- social assistance,
- medical assistance,

¹⁸ Next to the large numbers of families still waiting for resettlement, another problem of the Chernobyl Construction Program is the large and rising number buildings under construction that have not been completed on time. At the end of 2003 their number was 1548. Considering that 181 of them were privatized, 168 were given status of communal property and 1 was transferred to government, the number of buildings under construction was still as large as 1198

¹⁹ See *The 2003 National Report on Technological and Natural Safety of Ukraine*, p. 382.

- housing construction and public services infrastructure works related to resettlement (termed as improvement of living conditions of those residing on radioactively polluted territories and in places of compact resettlements).

However, considering a somewhat different nature of expenditure on nuclear safety, its volume being subject among other things to international commitments of Ukraine on securing the nuclear safety in general, and of the CNPP in particular, and the elasticity of these outlays being therefore rather limited, the fourth category of budget expenditure will be distinguished below, i.e. that on nuclear safety. Clearly, all four categories are not unequivocally defined since, e.g., often it may be difficult to distinguish between the first three (it will be an arbitrary decision whether to include, say, spending on convalescent vacations of people affected by radiation pollution, or on housing subsidies for the resettles, into the social assistance category, to medical assistance, or to resettlement expenses respectively). Bearing these limitations in mind, on the basis of information given in Table 1 the Chernobyl related budget spending structure, according to its main categories is shown in Table 4.

Table 4. Structure of central government spending on Chernobyl related programs in 2002-04 (in UAH million)

Expenditure	2002 budget		2003 budget		2004 budget revised	
	UAH mln	%%	UAH mln	%%	UAH mln	%%
Social Assistance	1,636.0	78.6	1,522.5	77.2	2342.05	76.7
Medical assistance	270.8	13.0	244.8	12.4	259.80	8.5
Resettlement related construction outlays	74.8	3.6	95.4	4.8	60.0	2.0
Nuclear safety measures	99.1	4.8	108.4	5.5	392.6	12.8
Total	2,080.7	100.0	1,971.1	100.0	3,054.45	100.0

Source: As in Table 1 above.

It will be immediately seen from Table 4 that the lion's portion of the Chernobyl related spending is absorbed by social assistance, that declining shares of outlays on Chernobyl resettlement construction programs will give rise to social problems unless the gap between needs and means is bridged by some other device, that there may be some mounting problems with declining shares of spending on medical assistance in the face of rising numbers of those in need of the after-radiation treatment following absorption of large overdoses immediately after the explosion or in the early phase of clean-up operations. We shall revisit these issues in the section on the need for Chernobyl strategy reformulation.

5. External assistance towards financing nuclear safety after the catastrophe

Even before the catastrophe, inadequate attention to nuclear safety in the former Soviet Block countries was of concern to European Atomic Agency, many international experts and the informed public opinion. Following the catastrophe, the need to address the enormous risks from deficient nuclear safety became a matter of immediate challenge for the countries of the region which operate nuclear reactors and for the international community at large. The challenges that faced Ukraine in this context were to transform the Sarcophagus around the damaged Chernobyl reactor into a stable and environmentally sound structure, to

decommission Chernobyl, to develop and implement a national strategy for safe management and storage of the nuclear waste and the spent nuclear fuel, and to increase nuclear safety at other nuclear power plants.

Since 1995, when the G7, the EC and Ukraine agreed to close the Chernobyl nuclear power plant by the year 2000, the EC has granted EUR 350 million in Tacis assistance (fuel gap excluded²⁰) for Chernobyl-related projects, including, i.a., assistance for decommissioning of Chernobyl and for designing replacement capacities (nuclear plants Khmelnytsky 2 and Rovno 4, or 'K2R4'); and the replacement of the temporary shelter ('sarcophagus') by a permanent structure. The European Bank for Reconstruction and Development has been asked to administer the newly established Nuclear Safety Account and the Chernobyl Shelter Fund, which brought also other external sources of finance. Moreover, EBRD is involved on behalf of the Donor Community in its multilateral effort (in addition to many bilateral schemes) of supporting Ukraine with its first two challenges.

The National Safety Account, through grants, financed an almost €150 million project which was as a part of a comprehensive programme to support Ukraine's decision to close Chernobyl in the year 2000 in accordance with the Memorandum of Understanding between Ukraine and the G7/EU. The main part of the project has financed two major decommissioning facilities that were scheduled to be completed by the year 2004. The Chernobyl Shelter Fund grant finances the **Shelter Implementation Plan** that aims at transforming the Chernobyl sarcophagus into a safe and environmentally stable system. When the new safe confinement is completed, currently scheduled for 2007, it will isolate the nuclear inventory of the sarcophagus from the environment for one hundred years and create safer working conditions for future waste management operations. By 2001, the European Union and 28 countries have pledged USD 717 million to the project, some 93% of the original cost estimate. There have been delays in implementation of the projects, largely due to a difficult institutional environment including political, legal, regulatory and administrative issues aggravated by frequent changes among key counterparts. However, following the 2002 Presidential Decree, and talks of Dr. Hans Blix, Chairman of the Assembly of Donors, with President Kuchma, in June 2002, progress towards achieving the targets has been noticeable.²¹

²⁰ The last reactor of the CNPP was closed in December 2000 generating additional costs of producing the same amount of electricity from traditional thermal power plants. This could have a detrimental (albeit temporary) impact on industrial output and depress domestic consumption. As a consequence, the notion of 'fuel gap' was defined as the additional (annual) cost to Ukraine of producing electricity in thermal power plants, using imported fossil fuel to replace the electricity previously produced by the CNPP reactor 3. The EC has agreed to significantly contribute to close this fuel gap. Under the Tacis programmes 2000 and 2001, EUR 25 and 20 million were allocated respectively, as free-standing initiatives. A third and last action was proposed under the 2002 programme. In addition to past Tacis support to promote energy saving policies, the funds generated by the fuel gap programme were to contribute to structural reform of the energy sector. Against the background of the recent uncertainty over the GOUs' position regarding the K2R4 project, the status of measures to support the fuel gap may need to be reviewed.

²¹ See *Country Strategy Paper 2002-2006 and National Indicative Programme 2002-2003, Ukraine, EU-EC*, 27 December 2001, p. 4, and *Strategy for Ukraine*, the European Bank for Reconstruction and Development, September 3, 2002, pp. 34-5. In 2000, a Euratom loan of the EUR equivalent of USD 585 millions was decided for co-financing with EBRD and Western export credit agencies the completion of the nuclear reactors K2R4, as a safe replacement for Chernobyl. This financial package was conditional on the implementation of internationally accepted safety standards for K2R4, based on a project design endorsed by Western Technical Safety Organisations (TSOs), and linked inter alia to policies supporting the reform of the energy sector, e.g. the development of a financially sound electricity market with market-based pricing and the privatisation of distribution companies. It is unclear whether and to what extent Ukraine is willing to go ahead with this project or choose to complete K2R4 by using alternative project designs (see *Country Strategy Paper 2002-2006 and National Indicative Programme 2002-2003, Ukraine, EU-EC*, 27 December 2001, p. 35).

Considering that nuclear safety measures must be subordinated to different rules and priority options than recovery and development strategies and policy options related to them, and that the former leave much less room for resource reallocation than the latter, in what follows the nuclear safety program of the GOU and of the Donor Community, and financial allocations related to it, will not be subject of our examination.

6. Nonfinancial assistance

Many localities in the Chernobyl affected territory were granted the status of Special Economic Zones (SEZ), or Priority Development Territories with Special Investment Regime (PDT). Both instruments imply tax exemptions and social contribution exemptions in the first period of any investment project and much reduced tax rates and social contribution rates later on, provision by central and-or local authorities of commercial and other infrastructure at no costs or below their respective commercial value, and other forms of state aid to private investments. As of January 1, 2003 there were together 18 SEZs and PDTs in Ukraine, and the total value of balance between tax and social contributions due to the state budget and tax relief and reductions in social contributions was UAH -25 million in 1999, UAH -31.5 million in 2000, UAH -116.9 million in 2001, and only UAH -0.5 and -0.6 million in 2002 and 2003 respectively.²² These numbers do not include, however, direct subsidies from local budgets and other transfers, as well as the value of infrastructural and other assets transferred to SEZs and PDTs.

According to GOU assessment, by the end of first half of 2003 SEZs and PDTs attracted 640 investment projects (of which 72 in the first half of 2003, compared to 67 in the first half of 2002). The total value of investment commitments of these projects was USD 4.7 billion (of which USD 400.3 million of the projects started in the first half of 2003 only). These projects will generate 73.7 thousand new jobs and help to maintain additional 97.3 thousand jobs. The total value of investment project completed from the beginning of SEZs and PDTs operation until end of the first half of 2003 was USD 1.1 billion, and they already generated 35.6 thousand new jobs and helped to maintain 77.8 thousand jobs. Total value of sold output in SEZs and PDTs reached in this period UAH 20.7 billion (of which UAH 5.5 billion in the first half of 2003 alone). Budget revenues from investment projects generated in the SEZs and PDTs reached in the first half of 2003 UAH 370.9 million (compared to UAH 236.1 a year earlier), of which UAH 71.2 million in SEZs and UAH 299.6 million in PDTs.²³

The Ministry of Economy assessment provides also information on the SEZs and PDTs results in regional cross-section. However, since it does not specify the regions and localities

²² See the Internet site of GOU. Unfortunately the information on how much of these privileges were directed to Chernobyl affected territories is not available. Nor do we know to what extent the recent declining trend of the balance between tax and social contributions due to the state and the respective tax and other reductions is due to improved collection capacity, and-or due to termination of these privileges. Total VAT exemptions in 2001 and in 2002 for all SEZs and PDTs in Ukraine were UAH 127.3 million and UAH 177.1 million respectively, and the import tariff exemptions in these years were UAH 232.2 million and UAH 679.0 million respectively. According to the Ministry of Economy the total value of tax and other relief in the SEZs and PDTs since they were put into operation until the end of first half of 2003 was UAH 650.1 million, of which UAH 8.1 million were reductions of tax and social contributions due to local budgets.

²³ See Результати функціонування спеціальних (вільних) економічних зон і територій пріоритетного розвитку зі спеціальним режимом інвестиційної діяльності у 1 півріччі 2003 року, Ministry of Economy, 2004.

included into these SEZs and PDTs on the Chernobyl affected territories, to illustrate the importance of these instruments of support there only the SEZ Slavutysh and the PDT in the Chernihiv Region will be discussed below.

The law establishing the Slavutysh SEZ (henceforth the SSEZ Law) was enacted in 1999, and ever since it has been amended already three times.²⁴ In accordance with the Law "On general principles of creation and functioning of special (free) economic zones", the SSEZ Law granted a special legal regime for economic activities undertaken in the territory of SEZ "Slavutysh" within the territorial borders of Slavutysh city, until January 1, 2020. The purpose of establishing the SSEZ was "to bring in investments to create new jobs in the city of Slavutysh and ensure employment of personnel of Chernobyl nuclear power plant that is dismissed in connection with early termination of operation of the plant's energy generators, to increase production of goods (works) and services, supplies of high quality goods and services to the domestic market, and to introduce new technologies and market methods of carrying out business activities and develop the infrastructure of SEZ "Slavutysh", to improve utilization of natural and labour resources." SSEZ Law, Article 1, paragraph 2).

In accordance with Article 9 of the SSEZ Law, the special privileges relate to payment of import duty, value added tax, enterprise profit tax, payments for state obligatory social unemployment insurance, fee to the State Innovation Fund of Ukraine, and land tax, etc.. Beneficiaries of SSEZ are exempt from payment of import duty for the period of implementation of investment projects, but no longer than for five years, if they bring in the territory of SSEZ materials, raw materials, equipment, machinery and parts thereof, for their own business needs related to implementation of these investment projects: They are also exempt from value added tax for period of implementation of investment projects, but no longer than for five years, for bringing into the SSEZ territory equipment, machinery and parts thereof, for their own business needs related to implementation of these investment projects. Profits of business operating in the SSEZ and generated in SSEZ from implementation of investment projects, approved by the executive committee of Slavutysh city Council, are exempt from taxation for three years. Subjects of SSEZ that implement in its territory investment projects approved by the executive committee of Slavutysh city Council, are also exempt from payments for state obligatory social unemployment insurance, from payment of contributions to the State Innovation Fund of Ukraine, and those subject which are owners or users of land in the territory of the SSEZ are fully exempt from payment of land tax in the first three years of implementation in the territory of SSEZ of investment projects approved by the executive committee of Slavutysh city Council, and in the following three years they pay the land tax at the rate of 50 percent of the existing rate of taxation. Finally, import by subjects of SSEZ of goods and other items for their own business needs in the territory of SSEZ and export of goods and other items, fully produced or sufficiently modified or processed in the territory of SSEZ, are not subject to licensing and quotas, unless otherwise stipulated in international agreements of Ukraine.

Since the SSEZ was established until mid 2003, 34 investment projects have been approved of a total value of investment commitments of USD 83.3 million. 1.8 thousand new jobs were established and some 30 thousand jobs saved. The value of investment projects completed by July 1, 2003 totaled USD 21.9 million, of which USD 7.3 million represented foreign investments. Budget revenues generated by these investment projects amounted to UAU 1.5

²⁴ See Laws No. 721-XIV of June 3, 1999, No. 2013-III of October 5, 2000, No. 3036-II of February 7, 2002, and No. 429-IV, of January 1, 2003.

million, and budget foregone revenues due to the above mentioned tax exemptions etc., were UAH 21.5 million.²⁵

The town of Slavutych is situated on the territory of Chernihiv Oblast which was all heavily affected by the Chernobyl catastrophe, and several localities of which were therefore granted the status of PDT (henceforth CPDT).²⁶ The CPDT covers Horodnia, Koryukivka, Novgorod-Siversk, Ripky, Semenivka, Chernihiv and Shchors districts within their administrative and territorial borders.²⁷ The aim of the CPDT was to 'introduce a special regime of investment activity within the territories of a priority development in Chernihiv oblast ... since January 1, 2000 for the term of 30 years'. The special regime of investment activity amounts to the introduction of tax and customs privileges for all economic agents that are legal entities and are registered following the established procedure at the territories of priority development within the scope of their economic activity. The special regime is granted following the conclusion of an agreement (contract) on implementation of a relevant investment project in the priority types of economic activity between the economic agent and local government (local state administration) of the territory of priority development. The estimated cost of the investment project must not be less than:

- USD 200 thousand – in agriculture, food, processing, light, pulp-and-paper industries, woodworking, production of articles of wood and furniture, in the sphere of health protection, education, culture;
- USD 300 thousand – in construction, tourism and recreation;
- USD 500 thousand – in mining industry, production of machines and equipment, manufacture of non-metal mineral goods, in chemical production and transport.

The special regime of investment activity implies the following privileges:

- exemption of raw materials, materials (as defined by GOU), machinery, equipment and component parts thereto (except excisable goods) from the import duty while importing (sending) them into the customs territory of Ukraine in order to be used for the implementation of investment projects until they are put into operation, but not more than for five years, as well as exemption of machinery, equipment and component parts thereto (except excisable goods) from the value added tax;
- exemption for a three-year period of the profit of the newly created enterprises, including restructured enterprises, generated due to implementation of investment projects, as well as profit of already existing enterprises that have been reconstructed or modernized, - in the part, derived from implementation of investments;
- non-inclusion of the invested outlays into gross income of the enterprise for the purpose of taxation, which has been obtained due to implementation of the investment project in the form of funds, material values, and intangible assets;

²⁵ See See Результати функціонування спеціальних (вільних) економічних зон і територій пріоритетного розвитку зі спеціальним режимом інвестиційної діяльності у 1 півріччі 2003 року, Ministry of Economy, 2004.

²⁶ See Decree of the President of Ukraine "On the Special Regime of Investment Activity on Priority Development Territories in Chernihiv Oblast" No. 729/99 of June 27, 1999.

²⁷ Of which Ripky and Chernihiv are included in the UNDP Chernobyl Recovery and Development Program operating areas. The Law "On the Special Regime of Investment Activities in the Priority Development Territories in the Zhytomyr Oblast", No. 1276-XIV of December 3, 1999 grants similar status of priority development territories, in their respective administrative and territorial borders to the cities of Berdyciv, Korosten, Novohrad-Volunsky, as well as Korosten, Novohrad-Volunsk, Luhynsk, Narodytsk, Ovrutche, Olewvsk, Malyn, Yemylchynsk and Volodarsk-Volyn districts, in the Zhytmyr Oblast, of which the city of Korosten and the district of Ovrutche are included in the CRDP operating areas.

- exemption from payment of the land rent for the period of development of a plot of land (planning of the territory, construction of infrastructure objects, etc.), established by the investment project, but for not more than five years.

Since the time the CPDT was effectively established (January 2000) until the middle of 2003, it attracted 15 investment projects of the committed value of USD 46.3 million. 1.8 thousands new jobs have been established and 2.3 thousand jobs saved. New investment projects are of industrial nature (they concentrate in the paper, textile, wood and pulp processing industries) and only a few in the agri-processing complex. By end June 200 the value of completed investment projects was USD 13.5 million, the value of their output was UAH 238 million and they generated 430 new jobs and saved 667 ones. Budget revenues generated in the implementation of these projects were UAH 8.9 million, the value of tax and other budget revenue exemptions was UAH 12.6 million, thus leaving the balance at UAH –3.7 million.

What appears to follow both, from the legal foundations of SEZs and PDTs located in the Chernobyl catastrophe affected territories, and from their practical operation, is that instruments of regional development policies have been used in the Chernobyl affected territories following more or less the same principles as anywhere else in Ukraine (where they tend to be rather overused on the whole). Because of the catastrophe the Chernobyl territories were given the respective status and privileges. Conspicuously, any vision on how these instruments could be moulded and adjusted to adequately deal with the specificity of the aftermath of the Chernobyl catastrophe was missing, however.

7. National Programs of Mitigation the Consequences of the Chernobyl Catastrophe

As soon as the Law on the Status and the Law on Legal Regime were enacted, they became foundations for National Programs of Mitigating the Consequences of the Chernobyl catastrophe. Elaborated by the Ministry of Emergencies and approved by the Government, and then by Verhovna Rada, they should take the form of Law, on the basis of which the National Programs would be financed by the State Budget. In practice, however, none of the two consecutive National Programs of Mitigation got the Rada's approval.

In 1992 a 'Concept of the Ukrainian National Program on Elimination of the Consequences of the Chornobyl Catastrophe and on Social Assistance of the Population, for 1993-1995 and until 2000' was developed by group of Government and the Ukrainian Academy of Science experts. Approved by Verhovna Rada in June, 1993, the concept paper centered attention on the radiation overdoses already absorbed by the affected population and on its continued exposure to radioactive pollution, and set as first priority the task to reduce the ecological, economic, social and psychological consequences of Chornobyl catastrophe. The process of developing this concept paper by the then Ministry for Chernobyl (and experts of the Ukraine's Academy of Sciences) into the National Program of Mitigation of Consequences of the Chernobyl Catastrophe was long and troubled, and it was not until 1995 that it was turned into *The National Program of Mitigation of Consequences of the Chernobyl Catastrophe in the Years 1996-2000*. The program was approved by the Government and largely reflected in State budget annual allocations. It addressed problems of immediate concern and of radiation and ecology safety nature in the first period after the catastrophe, with less attention given to economic development of the affected territories or stimulating production of radioactively-clean output. From this point of view the 1992-96 and up to 2000 NPM was more concrete

and, as it were, ‘instrumental’ than its successor; no wonder therefore that the former scored much better in implementation targets than the latter, that was of more declarative nature.

The next NPM (*National Program of Mitigation of Consequences of the Chernobyl Catastrophe in the Years 2002-2005 and until 2010*), currently under operation, addressed somewhat different problems that were more relevant to the new phase of handling the post-catastrophe recovery. It attempted to improve inefficient financial mechanisms of its forerunner, reduce the tax burden, stimulate economic recovery of the affected territories and of the resettles, and launch mechanisms of encouraging production of radioactively clean output. It defined three priority areas (called directions): (i) to provide medical assistance to the sufferers, (ii) to strengthen radiation safety of people staying in the contaminated territories and limit radioactive pollution in these zones, (iii) to provide social assistance to the sufferers, as well as economic rehabilitation of contaminated territories and their transfer to status of radioactively ‘clean’.²⁸ Each priority area in the *National Program* was linked to a number of tasks, or short- and long-term sub-programs, e.g. on complex medical and sanitation ‘protection of the Chernobyl sufferers in the area of medical assistance, and sub-programs on a) social assistance to Chernobyl sufferers, b) establishing conditions for economic rehabilitation of the contaminated territories and accelerating improvement in their radiation status, c) updating the legal framework necessary for enhancement of social assistance, d) improving public information system for the affected population in the area of social assistance.

The 2002-05 NPM followed the footsteps of its 1996-2000 predecessor in identifying strategic priority groups of population eligible for social assistance. Both NPM listed as first priority the invalids, children, sick people, clean-workers, people living in the radioactively contaminated territories, and finally evacuated and resettled people. A closer look at this list gives rise to a question, however – who else might have been considered as eligible for social assistance and, consequently, have there been any prioritization at all?

At the same time the 2002-05 NPM emphasizes the need to improve financing of social assistance in line with requirements of the “Law on status” and to better target social assistance system through development of data bank of all categories of people affected by the accident.

Regarding housing of the resettles, the 2002-05 NPM requests that all those who were eligible for resettlement immediately after the catastrophe should be resettled, ignoring significant improvement in radiological safety and socio-economic conditions in the past 18 years on most of territories originally affected by the explosion. Moreover, the 2002-05 NPM names the number of families that must be resettled following the original contamination records. Should the Program be endorsed by Verhovna Rada and become a binding law, there would hardly be way not to meet the objective.

Regarding economic rehabilitation of contaminated territories, the 2002-05 NPM is rather declarative, emphasizing the need to establish environment that would promote economic rehabilitation and development and, moreover, it stresses the need for greater involvement of local governments in developing pilot projects of local economic and social development that would help stabilize local employment and economic and social rehabilitation. Moreover, it

²⁸ Conspicuously, neither maintenance of safety of the ‘Shelter’ object, nor maintenance of ecological safety of the Exclusion Zone and the Zone of Compulsory Resettlement, etc., nor other nuclear safety measures feature among NPM’s declared priorities, although they feature prominently in the NPM’s financial outlays.

stresses the need for participation of local governments' budgets in financing such projects and for attracting foreign and Ukrainian investors.²⁹ Priority in socio-economic rehabilitation is to be given to settlements that in the 2002-05 period will be transferred from the zone of compulsory (unconditional) resettlement to the zones eligible for voluntary settling. However, encouraging local governments to actively participate in elaborating economic and social rehabilitation programs has been limited so far to reducing the respective shares of State budget financing, without providing local governments with legal and institutional foundations for such participation, and therefore not much progress could be achieved here.

When it comes to financing, the 2002-05 NPM follows financial commitments of the Law of Status and the Law on Legal Regime. It includes a Table that shows annual financial allocations from the State Budget in the years 2002-05 (these are included in Table 1 above for the 2002-2004 period under the NPM heading) and the respective total for the 2006-10 period. Interestingly, although both the annual budget lines and the proposed NPM's budget allocations are the same, yet the headings of the NPM financial table are those of the budget law and not those of the NPM, the NPM table shows no traces of priorities that are declared in the document and, moreover, it does not include any budget allocations for such NPM's priority area as economic recovery at all.

Considering inadequacy of State budget financing compared to financial commitments of both the 1996-2000, and the 2002-05 NPMs (see Tables 1 and 2 above), insufficient local government participation and sense of ownership in NPMs elaboration and implementation, and lack of legal and institutional framework for local government co-financing of Chernobyl projects and initiatives, the actual results of both these Programs must not be underestimated. While the specific achievements of both NPMs have been already discussed in the specific context of individual sub-programs, mainly regarding social assistance to the sufferers, efficiency of implementation of NPMs priorities in the areas of protecting the radiation safety of population and of medical assistance merit closer examination.

Of several measures aimed at protecting the population against radiation, most effective were: (i) substitution of non-contaminated food products for contaminated ones, (ii) liming the soils, meadows and pastures (that together with declining levels of radioactive Cesium 137 deposits accumulation reduced heavy metals accumulation), and (iii) increased use of mineral fertilizers. Between 1989-2001 alone agro-technical and agro-chemical measures (liming including), applied on 1.5 million hectares contributed to reducing radionuclide content by 2.5-5 times and crop contamination was reduced by 2-3 times. Moreover, in animal breeding special feed supplements and other modern technologies helped to reduce meat contamination (and if appropriately used – to eliminate it altogether).

Dosimetry passportization in 1996-2001 shows that appropriate use of radioactivity protection measures together with natural recovery processes resulted in significant reduction in the numbers of contaminated settlements in each and every zone of contamination; in 1350 settlements annual effective population exposure dose does not exceed 0.5 mZv, i.e. the upper limit for inclusion into the Zone of strict radiation control (compare with data in Table 5). Some 1.6 million people, including 390 thousand children, live in those settlements. However, for reasons already discussed, progress in resettlement from zones of compulsory and voluntary resettlement has been far less than expected.³⁰

²⁹ See *The National Program of Mitigation, 2002-2005*, p. 16.

³⁰ Considering that both factors continue to operate, as of mid 2004 there must have been further improvement of the relevant indicators.

Table 5. Zones of radioactive contamination in Ukraine

Name of the Zone	Radiological criteria	Main Characteristics		
		Territory (sq. km.)	Number of settlements (according to legislation presently in force)	Number of settlements (according to current annual dose)
Zone of strict radiation control	Annual dose >0,5 mSv per year Contamination density by: Cs-137 > 37 kBq·m ⁻² Sr-90 >0,74 kBq·m ⁻² Pu isotopes > 0,185 kBq·m ⁻²	26710	1290	336
Zone of right for voluntary resettlement	Annual dose > 1 mSv per year Contamination density by: Cs-137 > 185 kBq·m ⁻² Sr-90 > 5,5 kBq·m ⁻² Pu isotopes > 0,37 kBq·m ⁻²	22619	835	334
Zone of compulsory (unconditional) resettlement	Annual dose > 0,5 mSv per year Contamination density by: Cs-137 > 555 kBq·m ⁻² Sr-90 > 111 kBq·m ⁻² Pu isotopes > 3,7 kBq·m ⁻²	2003	92	3
Exclusion Zone	the territory around the Chernobyl NPP from which the population was evacuated in 1986	2122	76	76
TOTAL			2293	749 1458 - <0,5mSv maybe recognized as “not contaminated”

Source: Calculated by the UNDP Chernobyl Recovery and Development Program on the basis of *Загальнодозиметрична паспортизація населених пунктів України, які зазнали радіоактивного забруднення після Чорнобильської аврії: Узагальнені дані за 1998, 1999 та 2000 р.р.*, Ministry of Health Protection, Ministry of Emergencies, and Research Center of Radiation Medicine of the Ukrainian Academy of Sciences, Volume 9, Kiev 2001.

Current radiological situation in some of the already resettled territories and its forecast future improvement point out to a possibility of starting a recovery process that would return these territories to “normal” use by the communities living there. This holds especially for several enclaves of resettlements located in the Zhytomir and Kiev oblasts. These territories (hundreds of hectares large as a rule) are administrated by the Chernobyl Exclusion Zone administration. While the final decision to revise the status of any such territory administered by oblast authorities is in the competencies of the Verkhovana Rada, the process of revising the zone status is very complex and requires development of special methodology and procedures of legal, radiological, medical and social nature. Considering advantages of ‘recovery’ of such enclaves on the one hand, and the complexity of the process on the other hand, it may be useful to develop a pilot project that would aim to facilitate the process. Implementation of such a pilot project, with support of UNDP and other donors, would provide important know how on how to recover back to normal radioactively contaminated territories.

8. The Complex Program of Social and Economic Development of the Chernobyl Territories

Following Vrehovna Rada's Resolution of March 7, 2002 (No. 3117-III) On the Information of the Council of Ministers of Ukraine on the Implementation of the Law on the Status and of the *National Program of Mitigation 2002-2005* in the years 2004-05, Ministry of Emergencies started work on a project of the 'State Program of the Complex Social and Economic Development Territories affected by the Chernobyl catastrophe and of places of compact resettlement, for 2004-05 and until 2010' (henceforth the *Complex Program*). It is supposed to supplement the NPM 2002-05, and to be founded on the principles of complexity, market oriented business and investment environment, humanitarian oriented social assistance, ecology sound policies, sustained support from the state budget and innovative approach to solving the specific problems of mitigation the Chernobyl consequences.

The declared objective of the *Complex Program* is the 'development of the state policy of complex social and economic development of the Chernobyl affected territories and of places of compact resettlement, and establishing favorable conditions for dynamic development of these territories which would enhance the living conditions of the Chernobyl affected population and secure achievement of the state-guaranteed social standards irrespective of place of residence. All contaminated territories and places of compact resettlement will be transferred to a system of self-financing, except for part-financing from the State budget of development some products and some means of production'.³¹ In order to achieve this objective the *Complex Program* recommends the following measures:

- 'Acceleration of development of factors of production in the contaminated territories by means of structural changes of their economies on the basis of innovative strategies.
- Reconstruction of productive and public services infrastructure.
- Establishing favorable environment for complex social and economic development of the Chernobyl affected territories and of places of compact resettlement.
- Stimulating production and business operations in the Chernobyl affected territories and of places of compact resettlement.
- Establishing appropriate material and technical foundation for the health-care system.
- Improvement of productive employment of population, stabilization and improvement in the demographic and ecology trends, extension of life longevity, achievement of positive natural growth of population.
- Achievement of ecological safety, preservation of flora and fauna, establishment of natural parks.
- Ecological rehabilitation of the Chernobyl affected territories.
- Improvement in the legislation framework necessary for complex social and economic development of the Chernobyl affected territories and of places of compact resettlement.
- Development of international cooperation in the area of complex social and economic development of the Chernobyl affected territories and of places of compact resettlement'.³²

³¹ The 'State Program of the Complex Social and Economic Development Territories affected by the Chernobyl catastrophe and of places of compact resettlement, for 2004-05 and until 2010', Ministry of Emergencies, Kiev 2003, p. 10.

³² The *Complex Program*, pp. 10-11.

Its dated phraseology apart, the *Complex Program* is conceptually a continuation of National Program of Mitigation set into a context of regional development analysis and incorporating (in most general terms) the transition from humanitarian aid to regional and local development strategies proposed in the UNDP and UNICEF *Strategy for Recovery* report. However, on the one hand where the *Complex Program* speaks of regional development policies its recommendations hold for social and economic development of any region of Ukraine and there no traces of local development policies that the *Complex Program* recommends as specially adequate or devised to measure up to the specific challenges of the Chernobyl affected territories and their places of compact resettlement. No wonder therefore that the *Complex Program* does not distinguish between new legislation that needs to be developed as foundation for regional and local development policies in Ukraine as a whole and legislation necessary for regional and local development policy instruments that would be of Chernobyl-specific nature. On the other hand, where the *Complex Program* speaks of measures that are specifically Chernobyl oriented, its recommendations overlap with the measures implemented under the *National Program of Mitigation* and financed from the State budget.

More importantly, the *Complex Program* is meant to apply to 12 oblasts, rightly noting that the Chernobyl affected territories are located in all these oblasts. However, unless the program is about regional policies in general, and not about one to ensure social and economic development of the Chernobyl affected territories, it should take as reference point the mostly affected rayons. Inclusion into the *Complex Program* the whole Ivano-Frankivsk and Ternopil Oblasts, for instance, where there are only few settlements with the status of Chernobyl affected, undermines the declared objective of the program, makes it impossible to finance, and sets it in the general framework of omnipotent role of the State that can and should deliver anything that is considered a political priority thus making political pressures and lobbying the decisive factor of social and economic development.

Another drawback of the *Complex Program* is the fact that it does not take as its reference point the actual position in every affected rayon, its present radio-ecological characteristics including. Clearly, in determining the present-day account of social, economic and radiation safety standards in each and every rayon, local government administration and local NGOs should be included, but there is no evidence whatsoever of any such participation in the *Complex Program* preparation. How then, without local ownership of the respective parts of the *Complex Program*, its local co-financing is to be effected?

The *Complex Program* should clearly define radio-ecological threats to its implementation, and define them not in general terms but rayon-specific cross-section, following which only measures necessary to facilitate social and economic development in the Chernobyl affected territories, such as introduction of the system of international product certification (which is not, of course, Chernobyl-specific, but which may be of far greater significance in the Chernobyl affected territories than elsewhere in Ukraine), special measures for marketing output from radioactively contaminated territories, etc.

Finally, the *Complex Program* does not define the respective roles of central government, regional and local governments, private sector (Private-Public-Partnership projects including), NGOs, as well as of the donor community. The *Complex Program's* implementation appears to rely solely on State budget financing and the role of the state seen rather as an 'implementing agency' rather than partly the program's implementation facilitator and only in part its implementer.

At present stage the *Complex Program* is very much a ‘work in progress’, and it seems doubtful if revision of its fundamental concepts is within capacity of the Ministry of Emergencies, especially that with the already mentioned new Presidential Decree of July 6, 2004 that shifts coordinating and Chernobyl strategy development functions from the Ministry of Emergencies to a newly established Government Committee, the Ministry of Emergencies (and its partners and experts on this project in the Academy of Sciences of Ukraine) will continue this work.

9. The vicious circle of inadequate means and irrevocable commitments

For most respectable humanitarian reasons, because of political pressures, but originally also in expectation that it will be Soviet Union’s budget that would foot the bill, financial commitments to the sufferers of the Chernobyl catastrophe have always been far beyond financial potential of the Ukraine’s taxpayers. Second, containing the aftereffects of a nuclear reaction explosions in the short run had to be very much a sort of military operation, highly centralized in command and administration, and with little attention to costs and medium term social and economic consequences. Should a similar catastrophe happen anywhere else, its early stage would most probably look much the same. Added to this was the long tradition of paternalistic and centralized mode of central planning and administering, and no tradition of self government, market economy rules of operation, and participatory nature of any process of devising and implementation of social and economic development projects. Finally, clear and transparent accounting procedures for grants and other assistance, acceptable to international donor community were missing, although even in the presence of such procedures and overseeing institutions it would not be realistic to assume that any such assistance would go far beyond containment of immediate threat of nuclear spillover and early phase humanitarian aid.

The essence of the worst tradition of central planning is no respect for realism and setting unachievable long- and medium-term targets wherever short-run supply shortfalls are gravest. Following this tradition, financially over ambitious targets have been set not only in each and every round of deciding priorities and targets of Government of Ukraine’s Chernobyl programs ever since 1991 but, moreover, the full volumes of assistance and privileges once granted by laws, were reconfirmed by the Constitution of Ukraine. In its Article 16 it states that ‘...to overcome the consequences of the Chernobyl catastrophe – a catastrophe of global scale – and to preserve the gene pool of the Ukrainian people, **is the duty of the state**’ (emphasis added). Then, in its Article 22 the Constitution requests that ‘the content and scope of existing rights and freedoms shall not be diminished in the adoption of new laws or in the amendment of laws that are in force’. While Article 16 of the Constitution may be interpreted still to leave room for deciding by the Verhovna Rada and the government on what needs to be done in each and every stage of countering the Chernobyl catastrophe, and thus Article 16 by itself to offer legal grounds for revising early commitments, Article 22 makes benefits and privileges once granted irrevocable, which opens way for only too easy but very effective political demagoguery, without any respect for financial constrains. Consequently, the vicious circle of inadequate means and irrevocable commitments offers no chances of effective overcoming not only of economic consequences of the Chernobyl catastrophe, but – no less important – its social consequences.

Moreover, the Constitution’s Articles 16 and 22, as well as the primary and secondary legislation related to overcoming the aftermaths of the Chernobyl catastrophe, are rooted in

the traditions of the omnipotent role of the state, far from its subsidiary role in a true democratic state that operates in a market economy environment.

True, given the magnitude of the 1986 disaster and the long-term nature of radiation contamination and illness, it should come as no surprise that first priorities related to the sealing off the area of greatest contamination, resettling of people from the severely contaminated zones, protecting population against the use of contaminated food, water, and air and against a spill over of such contamination, implementing a thorough system of medical surveillance, screening analysis, and treatment; and establishing a complex system of financial, medical, and social support for the approximately three million people defined as “victims” of Chernobyl catastrophe, required extraordinary measures and massive humanitarian aid, and their delivery – as it was already noted – was in many ways in its early stages a quasi-military operation. However, what must have been the only way of delivery the necessary assistance and of containment a nuclear explosion in the first period after the catastrophe, became a serious impediment to social and economic recovery and a source of social apathy and psychological and inter-personal traumas for many Chernobyl sufferers, Chernobyl resettles and their new neighbors.

Aware of these impediments, the Government of Ukraine, oblast and rayon government administration, many NGOs active in the field, international donor community at large, as well as Chernobyl victims themselves have started discussion on a need for transition from a strategy of humanitarian welfare assistance fully managed by central government (although administered in part by local governments) to a strategy of comprehensive social and economic development, empowering local communities and local governments with far greater autonomy and means of finance, i.e. from a strategy embedded in dependency to one embedded in self-reliance.

Although discussions on revision in strategic priorities regarding overcoming the Chernobyl aftermath have started already in the late ‘90s, a breaking point was marked only in 2002 by the UNDP-UNICEF commissioned report, *Human Consequences of the Chernobyl Nuclear Accident: A Strategy for Recovery*, prepared with large participation of the Ukrainian, Belarus and Russian experts and addressed to all three countries affected by the catastrophe. The *Strategy for Recovery* proposed a new approach that would ‘focus on enabling the individuals and communities affected by the disaster to enter fully into society by taking control of their own lives and acquiring the means for self-sufficiency through economic and human development. Chernobyl related assistance ... should increasingly be measured against more holistic view of individual and community needs and, where possible, be progressively integrated into mainstream provision. ... Those exceptional needs that cannot be adequately addressed through mainstream provision should be carefully defined and be the subject of agreement between the governments concerned and the international community’ (p. 15).

In line with these recommendations the current (2002-04) UNDP Chernobyl Recovery and Development Program (UKR/02/005) while building on the first (1999-2002) UNDP Chernobyl Program and on previous assistance to the three Community Development Centers,³³ reoriented its priorities towards community governance and development and institutional support through partnership. The new UNDP program attempts to assist affected people and communities to initiate their own recovery through organizing themselves ‘into self-governing organizations to take the lead in planning, managing and implementing their

³³ The first three Community Development Centers were established in Borodianka, Slavutych and Ivankiv, and under the new UNDP Program another two were added, one in Korosten and the other in Boyarka.

own social, economic, and ecological rehabilitation and development. Through this experience, individuals will systematically re-engage positively with their surroundings, neighbors, and communities, and find pride in their joint and individual accomplishments.³⁴

As in the case of similar UNDP projects in Crimea and Kyrgyzstan the social mobilization approach in the Ukraine's CDCs provided an efficient and cost effective intervention directly addressing the problem of aid dependency. The approach was especially timely in Ukraine as it provided a method of stimulating the potential of the newly elected local governments following the enacting of new laws on Local Self-Government and Local Associations, as well as in transforming the thinking and planning of community leaders and people, and in introducing locally elected and appointed officials to a new mode of participatory local governance. Although important, among other things because they produced good results quickly by matching small UNDP grants with contributions from the local administration, from locally elected authorities, and from the interested communities themselves, these are merely pilot-projects that still wait for intensive replication and scaling-up.

However, despite the apparently government accepted recommendations of the *Strategy for Recovery* report and the encouraging experience of the new UNDP 2002-04 Chernobyl Recovery and Development Program, there is little progress so far towards a genuine shift in the paradigm of thinking about overcoming the consequences of the Chernobyl catastrophe through development policies instead of disaster management strategies, and through empowering people instead of mainly targeting them as recipients of subsidies. The *Complex Program* discussed above is a good example of this, and the primary reasons for insufficient progress must be far more than incapacity of government officials and experts who work on the subject, and their attachment to old clichés and central planning and administration. What are then the objective difficulties in changing the Chernobyl strategy paradigm?

There are a few. As long as Chernobyl victims and Chernobyl affected territories enjoy the status they have under the present legislation in force, they can claim all sorts of benefits and compensations, and legitimacy of their claims as a rule cannot be disputed. For individuals, this has a solid meaning of a cash transfers (however irregular they may arrive), a massive non-delivery of which may result in hot political demonstrations. For some of beneficiaries, especially those in rural areas, the elderly, etc., this may be the only cash that they get, with no alternative source of income. True, considering that until present the system of providing subsistence assistance (and partly also medical assistance) to the Chernobyl sufferers is hardly targeted, notwithstanding recent improvements there is plenty of anecdotal evidence on misuse of this assistance. Yet, at least as long as there will not be significant economic development, new jobs and less economic instability, no good business prospects and, consequently, weak corporate profits and local tax revenues, large number of Chernobyl assistance beneficiaries will defend their privileges with all their might.

For local government administration the status of Chernobyl affected territory (i.e. Chernobyl 'zone' of a defined category) gives the right to again, formally undisputable claims, say that gas and safe drinking water must be supplied to 'their' municipalities and settlements (if not to whole oblasts). Much the same goes for public services infrastructure, especially construction or refurbishing of rayon's hospitals and housing construction (that can always house also some local government officials, although not themselves Chernobyl 'victims' but 'absolutely necessary for Chernobyl assistance administration'), construction of schools, pre-

³⁴ UNDP, *Chernobyl Recovery and Development Program (UKR/99/014; UKR/02/005): Program Outcome Evaluation*, Kiev, November 2002, p. 3.

school facilities and other communal infrastructure. Among the competing needs and fight of local government leaders for State budget allocations, those from the Chernobyl ‘zones’ believe they have ‘additional points for their place of origin’,³⁵ and under the present system of state budget allocations they are unwilling to surrender them.

For politicians the genuine vested interests of the first two categories of beneficiaries are only too easy prey in their (again genuine) fight for re-election, continuation in their positions or in their political and professional promotion. Advantages of substituting local and area development strategies for the present aid-dependency strategies contradict the genuine interests discussed above, and the substitution will be hard to accomplish unless these interests can be somehow neutralized and accommodated.

10. Squaring the circle

Let us then turn to paradigm revisions that need to be introduced. Although some of them, e.g. revision of the present legislative framework or development of a sound and reliable information system on the Chernobyl-related nuclear safety, are necessary in a sense irrespective of whether the shift in the strategy paradigm is accomplished or not, they too should support it, and at the very least be consistent with it.

First, as it was already noted, the Government Chernobyl programs presently under operation are based on completely outdated legislation which is still in force (cf. footnote 9 above) and which effectively deters even development of a concept paper of new strategy for overcoming the consequences of the Chernobyl catastrophe. Revision of the present Chernobyl-related legislation must go far beyond its harmonization with that in other areas, such as taxation, regional development, land use, environment protection, etc. Moreover changes in Chernobyl legislation should go in step with revisions in NPMs, should the latter continue, lest mutual consistency between the former and the latter is lost. The main directions of development of a new legal framework suitable for and compatible with the new strategy of social and economic rehabilitation and development of Chernobyl territories seem to be the following:

1. Considering that radiation spillover protection measures are no longer required in most of the areas to which the Law on Legal Regime attributed in 1991 the status of ‘contaminated territories’ and, moreover, considering that this status restricts economic and other operations permitted in such territories, which in turn limits their human, social and economic development potential, the status of ‘contaminated territories’ should now be lifted and no other restrictions of allowed operations imposed instead. Lifting of the status should be preceded by development of a methodology of quantitative testing of environment safety, and radiation safety especially, by examination of the present ecology and radiation safety of these territories and by establishing the rules of its regular monitoring.³⁶
2. Similarly, also the Law on the Status should be revised. However, since the revisions relate first and foremost to social assistance, and they should be seen in a

³⁵ In the 1960s in many Soviet Bloc countries, considering much higher numbers of applicants to university and other high education institutions than their respective teaching capacities, and considering that applicants from poor workers’ and farmers’ families had much worse educational environment than children coming from urban, middle- and high-income families, in order somewhat to level-off university education opportunities of the former they were given ‘additional points for the place of origin’. The system was only too open to corruption and mismanagement, and after some years it was discarded.

³⁶ It should be noted, however, that a change in the Zone status may have important financial implications and therefore will be opposed unless some compensation measures are not proposed instead (see p. 29 below).

broader context of a new system of targeted assistance to the Chernobyl sufferers, they will be discussed separately.

3. Regarding economic environment that would encourage business operations and investments, legislation that presently applies to everywhere else in Ukraine but Chernobyl territories must apply there as well. Moreover, in light of special difficulties of these territories, special provisions could be considered to apply only on the Chernobyl territories. For instance, special powers could be attributed to local governments there, at the expense of powers presently vested in central and/or oblast governments, especially in safeguarding the participatory nature of development and implementation of plans of area and local development. The same refers to more fiscal decentralization, the right of rayon's (and community?) councils to impose local contributions, greater flexibility in the use of present legislation in force in Ukraine regarding special economic zones, territories of priority development, etc. Considering that attracting private credits could be a problem among other things because of lack of collateral, legislation that would help to establish fund trusts and similar financial institutions that could help in solving this problem should also be enacted. The same refers to legislation and institutional arrangements that would facilitate access to small credit schemes, such as credit unions, co-operative banks, etc.
4. The present 'top-down' paradigm of Chernobyl assistance system generated among many positive things also widespread social apathy and a 'Chernobyl victim' syndrome, as well as tensions in places of compact resettlement between assistance beneficiaries on the one hand and their new neighbors, devoid of any such assistance on the other hand. Although some of these problems will be solved with improvement in employment and with economic development, there is nonetheless a need for providing where necessary a legal framework that could help to mitigate these social syndromes and traumas (e.g. through community oriented development projects that would involve both the Chernobyl sufferers and their new neighbors). Moreover, legislative foundation for more inclusive system of development of National Programs that would guarantee genuine involvement and participation of all stake-holders is necessary.
5. Finally, regarding the present methodology of law enacting, the time within which the NPMs are being developed, discussed and redrafted, as well as the time needed for their final enacting, makes any law that regulates in minute detail problems that in a quickly changing environment also subject to changes outdated before all formalities are passed. Therefore before any new version of the NPM is approved, the legal and institutional framework is already in place and, moreover, that the law is less detailed and that it regulates the general procedures, rules and standards, and not a Hammurabi's type Code of Laws (1780 B.C.) of everyday conduct.

Second, there is a need for sound information on levels of the present radiological contamination, as well as that of output produced there, whether marketed or produced for own use, and whether sold in the Chernobyl affected territories or outside them. This information must be reliable, sufficiently disaggregated, open to the public (and the media) scrutiny and supported by a close monitoring system. It should include increased involvement of Ukrainian and international experts (as well as nuclear radiation rating agencies), as well as community-based groups and NGOs. It must record both deterioration (as may be the case, e.g. regarding some genetic radio-activity overdose effects that may take time to surface) as well as improvements, and its undisputed reliability is a sine-qua-non condition for success in

shifting the Chernobyl strategy priorities, in improvement of targeting of the assistance system to Chernobyl sufferers and for all economic recover and development projects.

Third, the system of social assistance (medical and resettlement assistance too) should undergo not only improved targeting (far not accomplished yet) but – more importantly – a conceptual redesigning.

As we have already seen, this system of social assistance must by definition be underfinanced, corrupt and hardly manageable. How to change it? For several years now the Government attempts to better target social assistance. Yet it is one thing to declare that it should be far more fine-tuned and disaggregated, instead of being offered on wholesale basis, and another to get this delivered when even the Ministry of Emergencies in its *Complex Program* makes all 12 oblasts its points of reference for the Chernobyl related assistance instead of making only the genuinely Chernobyl affected rayons eligible for it.

Considering the room for limitation of the Chernobyl related social assistance it may be useful first to distinguish between assistance linked to radiation overdose absorbed by individuals, and radiation intensity linked with territory. The former, once absorbed, is an indisputable claim for social, medical and other assistance. Moreover, depending on the volume of the overdose absorbed, these sufferers must be offered regular, free of charge, medical cross-examination. The first of these tests could be used at the same time as a quasi ‘means test’ to check reliability of the present entitlements to social assistance on grounds of health injury and loss of earning capabilities that might follow from it. Costs of medical assistance to genuine sufferers (which may well be rising with time) must be fully budgeted. Once the Information Bank on the CHNPS Catastrophe Sufferers becomes fully operational, medical assistance (and part of social assistance) should closely follow the sufferers. Had there been any misuse of entitlement to this assistance or too generous assessment of health injury, its incidence and volume should be revised strictly in line with standards defined by the legislation in force.

The same refers to other types of social assistance due to lost job opportunities, early retirement, lost property, but especially to resettlement rights and privileges, etc. Once their legitimacy is crosschecked, and their total value is added to that of medical assistance, the total value of the legitimate State liabilities, even after elimination of non-legitimate claims, may well be outside the limits of the State budget. Moreover, if continued in the present-day form, all this assistance would only reinforce the social apathy and Chernobyl ‘victim’ syndrome with all its consequences. Therefore a different option could be tried here.

In the course of comprehensive medical testing the sufferers, those who have not yet reached pension age especially could be asked if they would be ready to engage in some form of self-employment activity provided they were given some technical assistance on how to start and run individual business and, more importantly, provided they surrendered their legitimate assistance claims for lump-sum payments that would probably be less than the total value of those claims, yet large enough to represent true seed-money for any such start-ups. The main idea behind this scheme is to turn inaction and social apathy into action and taking individual responsibility for the future. The scheme has been applied in large restructuring operations of coal, steel and other industries in several countries in transition, and e.g., in France, Germany, and Italy, and – provided it was carefully devised and administered – it worked.

Who should legally be entitled to put forward such an offer on the part of the Treasury, what should be the discount between total volume of outstanding and future claims and the offer to buy them up (for a strictly defined purpose and under condition of surrendering any further claims in future), what should be the composition of the panel for interviewing individual sufferers and what sort of institutions would be responsible for establishing an environment that would encourage individual sufferers to positively respond to any such initiative are all good questions that will be dealt with later on in this section.

For those who would be unable (because of age, lack of skills and knowledge, etc.) or unwilling (because, say, of insufficient profitability of the proposed terms of trade-off) to enter the deal, the present system, numbering anything between 12-15 instruments of social, medical and resettlement benefits, should be simplified and lumped to a few benefits and compensations only that would be easier to administer and more difficult to corrupt.

All payments to Chernobyl sufferers are mainly transferred through local budgets and administered by local administration, and there lot of is anecdotal evidence on misuse of these transfers. Revision of the zone status will result in a loss of these transfers for residents, and would infringe some interests of local government administration, the more so that this status is linked to guaranteed access (a least nominally guaranteed) to direct State budget financing of such public infrastructure as gasification, road construction, construction of medical and social centers, etc. Moreover, until recently zone decontamination program included a very efficient component of roof and fences replacements works, replacements of upper soil layer, etc. The budgets for these works were also administrated by local governments. Even though these budgets were rather small, their recent disappearance (or suspension?) is already of big concern for local administrations and local population.

Considering that the Law on Legal Regime practically prohibits any economic activity in Zone 2 and that it requests people resettlement, albeit voluntary, from this zone, and – at the same time – financial transfers towards resettlement expenses are hardly arriving any more (except in pre-election periods), territories presently classified as Zone 2 demonstrate some motivation to upgrade their status to Zone 3 status where no such stringent restrictions on economic activity apply. This is evidenced, e.g., by long efforts of two Zone 2 settlements in the Rivne Oblast and three settlements in the Zhytomir Oblast crowned by Verkovna Rada's decision to upgrade their status to Zone 3. This trend for upgrading the zone status should be supported as it offers more space for economic and social rehabilitation delivered in a participatory policy-making process.

Notwithstanding this recent trend, local leaders from Zone 2 continue to claim assistance from the State budget towards delivery of public utilities to the resettled Chernobyl sufferers. Although most of these claims appear legitimate, this legitimacy may be questioned regarding privileges linked to grades of territory contamination. As it was already pointed out, radioactivity protection measures together with natural recovery processes resulted in significant reduction in the numbers of contaminated settlements in each and every zone of contamination (see pp. 20-1 and Table 5 above). Therefore benefits linked to territory contamination should be re-examined following the present-day contamination marks and depending on actual progress this type of assistance should be reduced or terminated.

Any attempt to do so, however, will be opposed by local government leaders and local and national politicians. Yet, similarly as in the case of individual benefits, a deal between the Treasury on the one hand, and those local politicians and representatives of local communities

on the other hand may be attempted. Its essence could be a trade-off between surrender of legitimate claims related to territory contamination (plus claims for additional investments outlays for public services infrastructure related to resettlements) in exchange for leaving some of these potential transfers at the disposal of the local governments and local communities in question, in order to help them finance their own development plans and initiatives.

Again, the same questions arise regarding who should legally be entitled to put forward such an offer on the part of the Treasury, what should be the discount between the total volume of claims and the offer to buy them up for a strictly defined purposes and under what conditions, etc. Yet, the underlying idea is parallel to that of buying up individual claims of the sufferers: to substitute hopefully a more sound system of financing local and area development projects for the present fight for higher State budget allocations that, incidentally, gives rise not only to economic underdevelopment, social apathy and traumas but, moreover, to political nepotism, clientelism and other forms of corrupt policy-making procedures.

Let us turn now to questions of who, what, how, and under what conditions. They need to be discussed in a broader context of participatory democracy, however. For a true democratic system participatory democracy is a value of its own. It involves not only free and democratic elections of the President and the Parliament, but also genuine local self-government and the accompanying government and financial decentralization, as well as self-government of professional and other associations, NGOs, etc. However, a fully-fledged participatory democracy is also an instrument of critical importance for sustainable macroeconomic stability because unless decisions of public services infrastructure and financing are taken by local self-government authorities with participation of local stake-holders, no rationalization of budget financing will be possible. Half capacity attended schools, medical centers, etc. will continue to operate unless and until a decision to close them will be in powers of local and communal self-government authorities that would have the right to use the thus saved money for some other local and communal purposes. On both counts therefore power-making decisions of rayon and local councils and governments as well as involvement of experts and community-based groups in political decision-making processes should both be increased. As it was already observed, expansion of local self-government is especially timely in Ukraine following the enacting of new laws on Local Self-Government and Local Associations (see. 24 above).

Both types of potentially possible buy-ups at a discount of undisputable claims of individual sufferers and of claims linked to territory contamination status have much in common. First of all, to make them realistic and credible, they require a solid cost and benefit analysis to be done by the Government. Clearly this must be preceded by a sound reassessment of undisputable State liabilities, present and future, taking into account the improved radiation position of the Chernobyl affected territories and checking assistance eligibility of the present-day beneficiaries. This exercise should be done with large involvement of local government and community leaders, local and community social workers, the media, etc. At the same time a medium-term budget expenditure framework (MTEF) should be prepared. It should define budget allocations over a definite period of time - say, three years, as – clearly – any buy-up operation of a magnitude that is likely to result from calculating the total value of the aforementioned claims cannot be done in a year without seriously damaging macroeconomic stabilization. To add credibility of government commitments this MTEF should be endorsed by both the IMF and the World Bank.

Parallel to these efforts, legislation that would introduce genuine fiscal decentralization, expand autonomy and powers of local governments, develop genuine local self-government (at least as pilot projects in the Chernobyl territories), and institutionalized various forms of participatory democracy, should be enacted. All these measures are of critical importance for credibility of the buy-up operation and for right use of the finances received in its result by Chernobyl affected individuals and territories, lest the present social apathy, 'victim' syndrome, and economic development deadlock continue.

The terms of the deal (deals) should be decided on the one hand by the Government team, that should probably be co-chaired by the Ministry of Finance and the newly established Chernobyl State Committee, and on the other hand by local and community leaders, with representatives of important stake-holders, NGOs and local business including. The terms of respective deals may well differ between individual rayons and communities, considering differences in their territory contamination and therefore in their legitimate claims. Prior to deal negotiations, area, community and local (rayon) development plans and initiatives should be prepared by area, community and local leaders, with the largest possible participation of all stake-holders. In developing area-specific programs such peculiar characteristics of the Chernobyl affected territories as acreage of contaminated area, number and area of resettlements, and areas re-classified from Zone 2 to Zone 3 status must all be taken into account. Again, cost-benefit analysis of these local development plans should be done, among other things to provide some terms of reference in the course of buy-up deal negotiations. The Government negotiating team should be given some flexibility and autonomy in reaching compromise end-results.

Regarding individual Chernobyl sufferers, following medical testing, they should be invited first to a panel that would explain to them the essence of the self-employment offer, its chances and risks, potential assistance that they would receive concerning running their individual businesses, at least in their initial stages, etc. The panels should also help the interested individual sufferers to calculate the needed seed-money, the initial costs of output, the volume of potential market, etc. Clearly, since many of these functions are routine activities of 'business centers' and the like, their participation in the panels is no less important than that of local and communal leaders, NGOs, etc.

Procedures and techniques of striking the respective individual buy-up contracts could be similar with two exceptions. First, considering that these individuals may easily be far unequal partners in contract negotiations they should be allowed to be assisted by local experts, social workers or anybody they would have confidence with. Secondly, all buy-up talks should be preceded by a massive information action and, more importantly, by developing business infrastructure and business environment, business information including. Clearly, activation of social centers (of the UNDP-CRDP variety or other) is a must.

What then should be the economic recovery schemes to be applied in the Chernobyl affected territories? Instrument-wise they need not be different compared to a standard menu of options for area and local (regional) development planning. What is badly needed from this point of view, applies as much to Chernobyl as to Ukraine as a whole: improved business environment and public governance (more transparency and less corruption), simplified business registration procedures, improved commercial and other judiciary operations, improved access to commercial finance, etc.³⁷ What should be the specific fields of profitable

³⁷ There are many accounts of economic policy measures necessary in Ukraine, see e.g., *Country Assistance Strategy for Ukraine for 2004-2007*, World Bank, Report 26448, Washington D.C., 2003; *Ukraine: Selected*

business operations is for businessmen rather than experts to decide. Of specific importance for rehabilitation and development of Chernobyl territories are three factors, however.

The first is road, gas, water and other infrastructure. These are costs that no single business can sustain, certainly no small or medium sized that are to become a true engine of growth and employment. Lack of infrastructure is also impediment for new investments, whether Ukrainian or foreign.

The second factor is sales markets. There are hardly any instances of successful restructuring and development strategies in their absence. It is also for this reason that introduction of the system of international product certification (which is not, of course, Chernobyl-specific, but which may be of far greater significance in the Chernobyl affected territories than elsewhere in Ukraine), is especially important (see p. 23 above), as are special measures for marketing output from territories that were in the past or continue to be radioactively contaminated.

The third is the need, possibly more in Chernobyl than elsewhere in Ukraine, for Private-Public-Partnerships. It is important for participatory nature of any development projects and initiatives. It is important because it can offer better management and business oversight of these projects. It is important because it may offer additional financial and other inputs in an environment of finance and other resource shortage contrasted with large and urgent needs.

How the donor community at large, and UNDP especially, could help in ‘squaring the circle’? The June 2002 *National Workshops on Chernobyl*, attended by many donor representatives, concluded that it was ‘necessary to assist the people in the region affected by the Chernobyl disaster with creating a perspective of sustainable socio-economic development while paying proper attention to the specific needs of the people in health care, psycho-social and rehabilitation services’.³⁸ Following up this recommendation and to maintain policy development processes regarding Chernobyl recovery, the UNDP Chernobyl Program works towards:

- intensifying policy dialogue with concerned government agencies on macro and sector policy issues related to the elaboration of the new Chernobyl strategy concept paper;
- prioritizing the Chernobyl region within the UN Country Office in Ukraine when areas are being selected for pilot interventions, and developing and implementing special policy instruments that would be adjusted to special characteristics of the localities of intervention;
- enhancing the integration of UN activities and local and national government initiatives, particularly with those that support the implementation of the new strategy;
- strengthening local partnerships with donors and related resource mobilization and
- enhancing public relations activities to support policy dialogue and promote the new paradigm of UN strategy for Chernobyl recovery, and through a targeted public information campaign, launched especially at the regional and rayon levels, to help better understand and internalize the essence of the new strategy thereby reducing the potential political opposition against it..

Issues, IMF Country Report No.3/173, Washington D.C. 2003, *2003 Results in Ukraine and Achieving Impact in Ukraine in 2004*. Strategic Notes Prepared by UNDP Ukraine, February 2004, or *the Ukraine: Building Foundations for Sustainable Growth – a Country Economic Memorandum*, vol. I, World Bank (work in progress), to name a few only.

³⁸ See UNDP, *Chernobyl Recovery and Development Program (UKR/99/014; UKR/02/005): Program Outcome Evaluation*, Kiev, November 2002, p. 11.

Helped by the UN Report, the visits of Mr. Kofi Annan and Mr. Kenzo Oshima in 2002 and many subsequent initiatives, some forward movement with Chernobyl policy in Ukraine is observed. A new law on Chernobyl is under preparation, as it the revision of the present zoning system to better reflect environmental changes since 1986 and changes to the list of 'victims'. However, there is, as yet, much of work to do even only to assist in better comprehending and internalizing the objective present needs of any Chernobyl Social and Economic Development Strategy. Hopefully, the present concept paper will add to better understanding of some of the problems and challenges in stake.