United Nations Development Programme

Regional Bureau for Europe and the CIS

DRAFT

Executive Summary: Central Asian Regional Risk Assessment

November 2008

Overview

This document offers an initial presentation of the results of the forthcoming *Central Asian Regional Risk Assessment*. This document (the CA RRA):

- Examines the risks facing Central Asia associated with the possible deepening and widening of the "compound crisis" phenomena that took hold in Tajikistan during the first quarter of 2008, in terms of threats to water, energy, and food security;

- Provides an update concerning the on-going response to these threats in Tajikistan and the Kyrgyz Republic, on the part of governments and the international community; and

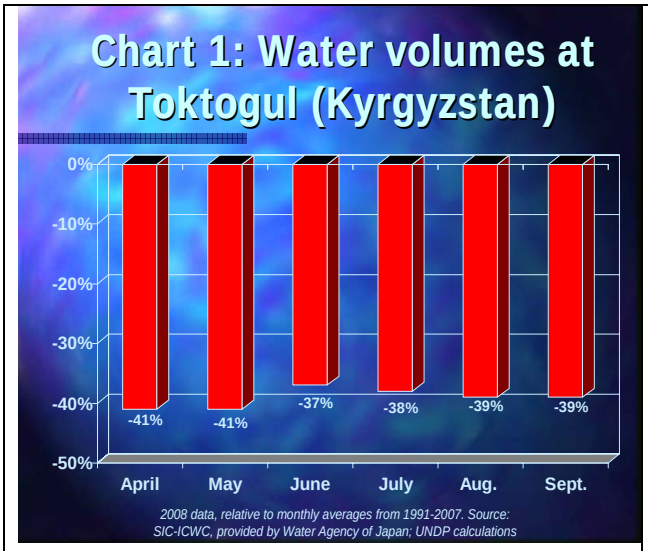
- Suggests some initial conclusions concerning possible improvements in how the United Nations system, and international community more broadly, manages the nexus of development and humanitarian programming, in light of "complex crisis" phenomena.

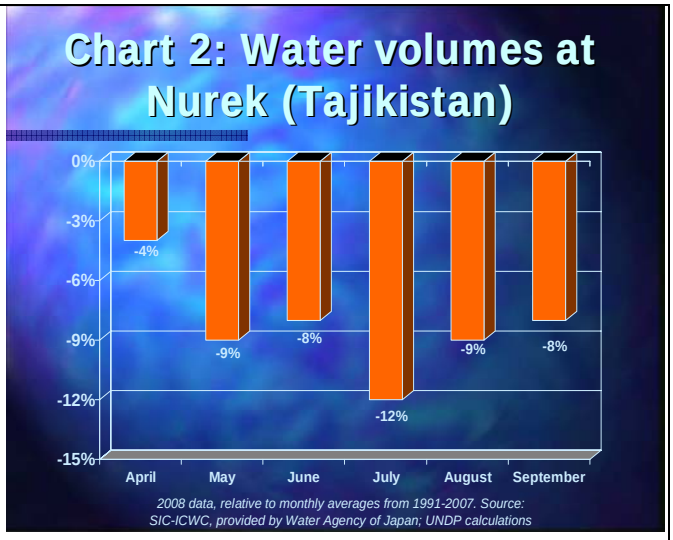
By providing an overview of the main findings and recommendations, this document is intended to facilitate the process of consultations on the CA RRA. It also sets forth the next steps, and anticipated timing and outcomes of the report's completion.

Compound crisis: Origins and update

The exceptionally cold winter of 2008 that afflicted much of Central Asia caused breakdowns in Tajikistan's energy infrastructure, and reduced winter crop yields and livestock herds. Millions of people spent weeks in exceptionally cold winter conditions without access to reliable heating and electricity services; economic growth slowed; food and energy security were adversely affected. Notwithstanding the presence of development programming portfolios and humanitarian response instruments, and despite the legacies of annual appeals for donor assistance, the Government of Tajikistan, United Nations agencies, and the international community were unable to quickly and effectively respond to the humanitarian challenges presented by the compound threats to energy and food security. These problems were exacerbated by global food and energy price trends, and subsequently by the onset of drought in the spring and summer, across the region. The drought conditions in turn exacerbated the low water levels in the hydro power stations

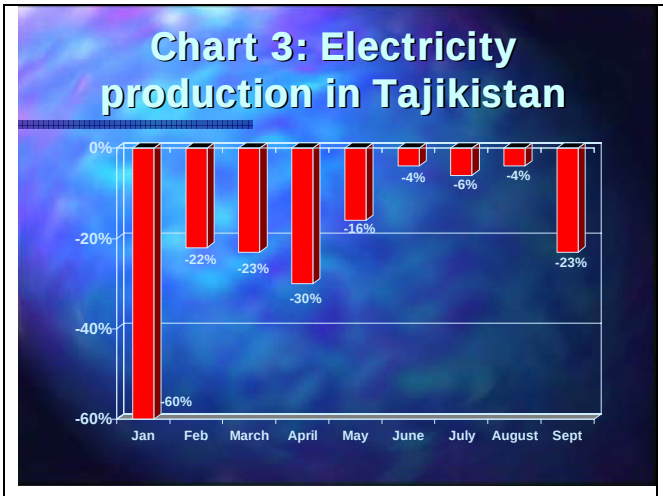
that generate the bulk of the electricity consumed in Tajikistan and the Kyrgyz Republic—where generation capacities had been taxed by exceptionally high demands for heat and electricity during the winter months.

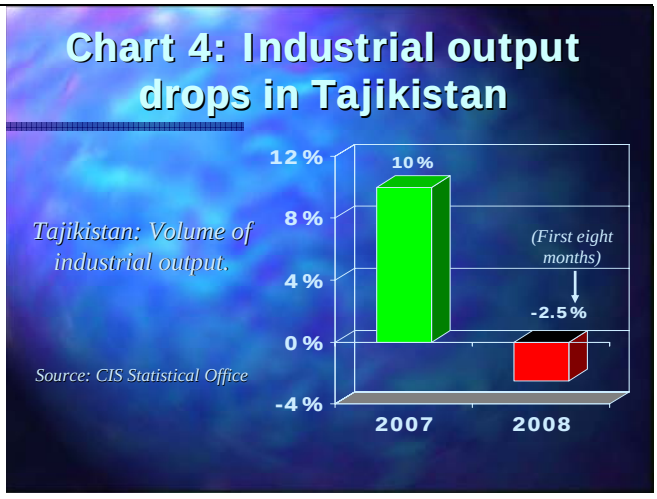




Developments during the second half of 2008 have regrettably shown that concerns about the possible repeat and spread of Tajikistan's compound crisis have not been misplaced. Work on the CA RRA has *inter alia* brought the following facts to light:

Water, energy, and food insecurities remain significant in Tajikistan, and have become a serious problem in the Kyrgyz Republic. In particular:



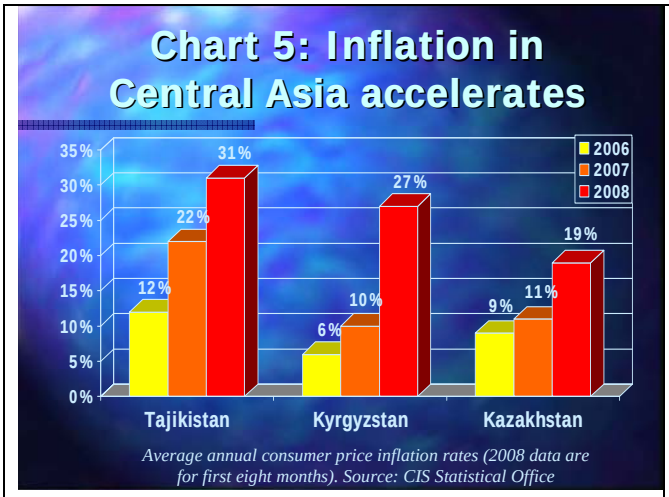


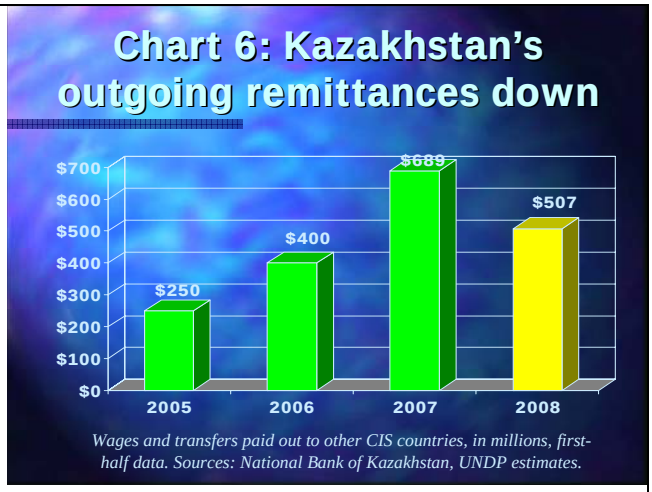
- Water levels in the Toktogul (Kyrgyz Republic) and Nurek (Tajikistan) hydro power stations have remained well below historical levels throughout 2008 (see Charts 1, 2 above).

Water levels in the Syr-Darya river basin are particularly low, affecting the Chardara (Kazakhstan) and Kayrakum (Tajikistan) reservoirs as well as Toktogul.[1]

- These low water levels have depressed electric power generation and industrial production in 2008. This is most apparent in Tajikistan, where electric power generation and industrial output through the first three quarters of 2008 were down 13% and 2.5%, respectively, compared to the same period of 2007 (see Charts 3, 4 above).[2] In both countries, electricity users are suffering from planned and unplanned cut-offs to electricity. Electricity and water tariffs for households and other users have either risen sharply, or expected to do so in the next 12-24 months.[3] Despite efforts to reduce and rationalise electricity demand, there is a real threat that water volumes in the Toktogul and Nurek hydropower stations will drop to their "dead levels" before the winter is over, depriving millions of people in the Kyrgyz Republic and Tajikistan of heat and electricity.

- The sharp run-up in food prices during 2007-2008 has exacerbated food security concerns across the region. The joint *Food Security Assessment* conducted in the first half of 2008 by FAO, WFP, and UNICEF concluded that some 2.2 million people in Tajikistan are experiencing food insecurity; 800,000 of these were found to be severely food insecure, and in need of immediate assistance. In the Kyrgyz Republic, the *Winter Response Plan* developed by the Government and the UN Country Team found that some 1 million people were vulnerable to higher food and energy prices.





[1] Concerns are also growing about possible declines in these stations' generation capacities from given water levels and volumes. For example, Government of Tajikistan documents indicate that the hydro generation units at Nurek have been in operation for more than 35 years, and have undergone significant depreciation during this time (*Action Plan to Mitigate the Energy Sector Emergency*, 9 February 2008). According to press reports, one of Nurek's turbine units is sinking into the reservoir.

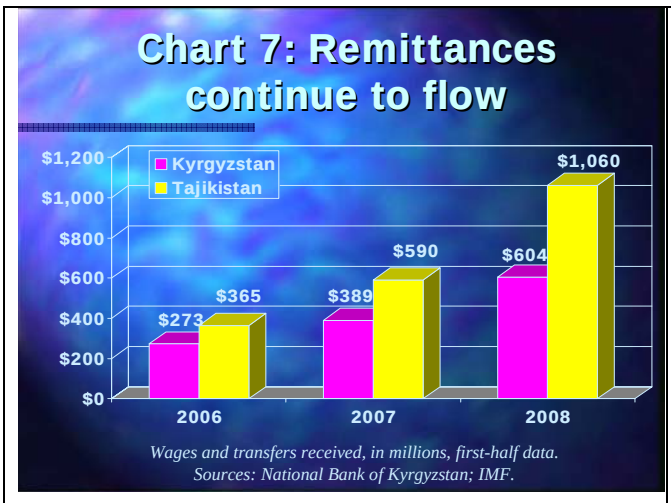
[2] In the Kyrgyz Republic, an even sharper decline (16.5%) in electricity production was reported during the first three quarters of 2008. However, high gold prices apparently helped push industrial output and GDP up by 8.6% and 6.6%, respectively, during this time. Gross value added in the agriculture and forestry sector was reported up 2.2%, despite the drought; increases in cultivated land seem to have offset declining yields.

[3] In Tajikistan, electricity tariffs for households rose 20% in January 2008; additional 50% increases are expected by 2010.

- Drought conditions have apparently been particularly severe in Central Asia's southern regions (including Afghanistan), the Ferghana Valley, and the Aral Sea delta. These have led the US Department of Agriculture to forecast 25% declines for the 2008-2009 wheat harvest in Tajikistan and Turkmenistan; a 3% decline is forecast for Uzbekistan. If correct, these projects suggest that the worst impact in terms of food security may be yet to come. Moreover, according to international press reports, bread shortages were reported in early November in Ashgabat and other Turkmenistani cities.

Growing macroeconomic risks: While GDP growth continued during the first half of 2008, inflation rates in Tajikistan and the Kyrgyz Republic also accelerated (see Chart 5). The same goes for Kazakhstan, where economic growth underwent a sharp slowdown as the effects of the global financial crisis began to be felt. Remittance outflows from Kazakhstan have begun to decline (see Chart 6).

Fortunately, there is some good news as well. Remittances from the Russian Federation to other CIS countries grew strongly in the first half of 2008, offsetting the impact of the declines from Kazakhstan cushioning the impact of a possible slowdown in the Russian economy in late 2008 and 2009, due to the global financial crisis. Continued strong remittance inflows helped support household spending, construction, and GDP growth in the first half of 2008, as did surprisingly strong growth in agricultural output (see Charts 7, 8). Global food and energy prices have fallen sharply from their mid-2008 peaks; bumper harvests in Russia and Ukraine should help take some of the regional pressures off food prices. Kazakhstan, Turkmenistan, and Uzbekistan are on track to report large current account surpluses in 2008; governments in these countries should have no difficulties importing additional foodstuffs, should such be necessary. Regional cooperation seems has come back into focus: he Central Asian heads of state used the CIS Summit meeting in Bishkek in October to announce an expanded regional cooperation programme, with a special focus on "*hydro-energy support, fuel resources supply, water accumulation in the Toktogul and Nurek reservoirs*".



On the other hand, these trends may not bring immediate relief to hard-pressed Central Asian households. For one thing, Central Asia's under-developed transport and trade infrastructures can deprive certain regions of access to foodstuffs, fuels, and other critically important goods and services even when these are held in large amounts in central stock piles. And while falling oil

prices may squeeze Kazakhstan's balance of payments, the prices that Tajikistan and the Kyrgyz Republic pay for gas imported from other Central Asian countries seem likely to rise with Gazprom's promise to pay Central Asian exporters "European prices" for gas shipped west through Russia's pipeline network. Likewise, the regional impact of the unfolding global economic crisis could deprive many Tajik, Kyrgyz, and Uzbek households of the remittance incomes on which their living standards depend. And as promising as the October Bishkek regional cooperation agreement may sound, Central Asia's post-Soviet history is replete with dozens of such (largely unimplemented) agreements.

Still, if water, energy, and food insecurities are now intensifying, they have yet to be translated into general macroeconomic instability, either in Tajikistan and the Kyrgyz Republic, or in other Central Asian countries. Whether these favourable trends continue—particularly in light of the unfolding global economic crisis, and the possible impact of the drought on the 2008-2009 winter wheat crop—remains to be seen.

Government responses

With support from the international community, the governments of Tajikistan and the Kyrgyz Republic have designed and introduced programmes to respond to these threats. In Tajikistan, implementation of the *Action Plan to Mitigate the Energy Sector Emergency* began in February, with a special focus on measures to reduce energy consumption, repair damaged infrastructure, replenish fuel stocks for power plants, and increase electricity and gas imports from neighbouring countries. This was followed in May 2008 by the *Action Plan for Uninterrupted and Efficient Operations in Autumn-Winter 2008-2009*, which sought to provide an integrated response to the country's energy, food, and water (and sanitation) challenges. In the Kyrgyz Republic, the authorities in May 2008 adopted an *Action Plan for Overcoming the Energy Crisis*; this was followed by the October 2008 *Winter Response Plan*.

The response in both countries has been driven primarily by energy sector tensions, where planned (*inter alia* via load shedding) and unplanned shortfalls in electricity delivery are becoming increasingly common. In particular:

- In Kyrgyzstan, planned blackouts were introduced in March 2008, lifted in mid-June, and then re-imposed in August, once it became clear that water volumes at the Toktogul dam would not be restored to planned levels by the end of the summer. On 7 October, it was announced that power cuts would be extended to 12 hours per day in most oblasts. Only nine hours of electricity per day would be supplied in Batken oblast; in Bishkek, only 14 hours of electricity per day is guaranteed. Further reductions in energy demand are to result from the closures from 25 December through 1 March 2009 of those schools that use electricity for heating; coal-heating systems are to be installed in new schools. Generation capacity of the Bishkek Combined Heating and Power Plant is to be upgraded via refurbishing; additional fuel has been procured, thanks to a $5 million World Bank emergency energy assistance grant.

- In all Tajikistan's oblasts except for Dushanbe, households only have access to electricity (provided by Barqi Tojik, the monopoly electricity supplier) during 3.30 – 7.30 and 17.30 – 20.00 daily. Access is further reduced for other users (businesses, schools, hospitals—unless they have their own generation systems). This is despite the introduction of additional generation capacity in the Sangtuda hydro power plant, which came on line in November. In

addition to improving food stocks for health facilities, kindergartens, retirement homes, and boarding schools, the Tajikistani response has emphasised the repair of irrigation systems, drainage systems, and pumping stations.[4] Contracts for increased imports of gas (from Turkmenistan and Uzbekistan) and electricity (from Turkmenistan) have been concluded.

- Longer term, both countries anticipate significant additions to power generation capacity, in the form of power stations running both on hydro and fossil fuels. Tajikistan's February 2008 programme calls for the modernisation of the Nurek hydro power station and of the country's gas distribution system. These measures would boost productivity (or reduce losses) by up to 15% in electric power generation, and by up to 19% in gas distribution. Similarly to Tajikistan, the Kyrgyz Republic is emphasising the completion of the Kambarata hydro power plant along the Naryn Cascade, as well as measures to reduce systemic losses.[5]

Table 1—Learning from the 2008 compound crisis: Protection and vulnerability*

Questions; respondent groups	*Answer*		*Sample size*
	No	*Yes*	
Households			
Does your family have enough fuel on hand for the winter months?	69%	31%	845
- If no, does your family believe it can buy enough fuel for the winter?	95%	5%	548
Health care facilities			
Was electricity normally available in your facility during October 2007 – March 2008?	75%	25%	184
Does your facility have a generator?	63%	37%	184
Does your facility have stoves or other heating apparatuses?	68%	32%	184
Does your facility have a functioning water supply?	45%	55%	184
- If yes, does the system supply at least 60 litres of water per patient, per day?	46%	54%	184
Do UN, NGOs, or other development agencies implement projects in your facility?	76%	24%	184
Schools			
Is electricity normally available in your school during October – March?	74%	26%	210
Does your school have a stove or other heating apparatus?	74%	26%	210
Does your school have a functioning water supply?	64%	36%	207
Do UN, NGOs, or other development agencies implement projects in your school?	51%	49%	220
Water supply systems			
Does your community enjoy property functioning water systems?	64%	36%	70
Has water availability in your community declined in the last four months?	48%	52%	66
Do community members have concerns about the quality of the water they consume?	45%	55%	66

* Data collected during 1-10 October 2008 by UNDP-Tajikistan's Disaster Risk Management Project.

The ultimate effectiveness of these measures remains to be seen. As is shown in Charts 1 and 2 above, the electricity conservation measures that have been introduced have not been able to push the water levels at the Toktogul and Nurek hydro power stations back to levels consistent with their historical averages. While energy imports seem to be running at above-average levels,[6] they have not been able to offset declines in domestic power generation. Press reports in both countries

[4] Although it has fallen sharply in the last decade, agriculture in 2007 still accounted for 19% of Tajikistan's electricity consumption, due to the importance of electric irrigation pumps.

[5] Systemic losses of electric power in the networks exceeded 40%, about 25% of them fall for commercial losses and theft. As a result quasi-fiscal budget deficit in the electric power sector as of the end of 2006 amounted to 5.4% of GDP. Electric power bills collection in 2006 amounted to 72.3% only. (CDS, 2007: 24)

[6] Tajikistan's electricity imports during the first nine months of 2008 were up some 13% over the same period of 2007.

are rife with allegations of inefficiencies and corruption; in Tajikistan, questions have been raised about the allocation of electricity to TALCO aluminium smelter (which accounts for up to 45% of Tajikistan's electricity consumption) and other users, particularly households.

A great deal depends on the procurement of additional imports, in both countries. However, the delivery/transit of gas and electricity via Uzbekistan could fall prey to perennial disagreements about pre-existing pricing; according to press reports, debts of Tajikistani gas importers vis-à-vis UzTransGaz have risen to some $4.5 million. TajikGaz's abilities to settle these obligations are in turn weakened by the fact that many of its largest clients are themselves in arrears for gas they used—the bulk of is account for by the cement industry ($1.6 million) and electricity and heat producers ($1.5 million) of these arrears come from electricity and heat producers.[7] Similar problems have been responsible for the failure to implement many agreements on regional energy cooperation in the past; the Bishkek accord could likewise fall victim to these tensions.

In light of the critical immediate needs facing these countries, the short-term urgency in these approaches is understandable. Still, they run the risk of diverting attention away from three other imperatives. First, as the data in Table 1 above show, it is not at all clear that those who were most vulnerable during last winter's compound crisis in Tajikistan have received the support they need in order to prevent a repeat in the winter of 2008-2009. The "big picture" emphasis on expanding and repairing electric power generation, transmission, and distribution capacity may have diverted attention from more prosaic but equally important measures to ensure that schools and hospitals are equipped with generators and sufficient fuel to get through the winter.

Second, the problems now afflicting both countries' energy sectors are consequences of decades of under-investment, and the inadequacies of measures to reform and modernise energy regulatory frameworks. The production and distribution of electricity, gas, and other energy sources in the region is dominated by state-owned monopolies whose tariffs (for households) are often set below long-run marginal costs, and who use their control over transmission networks (and other infrastructure assets) to discourage entry by competitors. Potentially competitive activities (e.g., electricity generation) should be separated from activities with strong "natural monopoly" characteristics (e.g., electricity transmission via high-tension power lines), in order to increase transparency within the sector, reduce the administrative burdens on these countries' limited regulatory capacities, and attract the private investment needed to meet capital requirements. Regulatory reform is particularly important for reducing losses, raising energy efficiency, and encouraging the development of alternative energy sources.

Third, the drought conditions now affecting the region raise the question of whether Central Asia is running out of water. Until now, the conventional wisdom has held that the distribution of the region's water resources was much more important than its absolute levels. This was particularly the case for "upstream" Tajikistan and the Kyrgyz Republic, which were perceived as having immense glacier water repositories. However, according to a report issued this fall by the United Nations Environment Programme and the World Glacier Monitoring Service, glacier area in the Tien Shan mountains decreased by 25-35% during the 20th century. Rates of melt have increased significantly since the 1970s. Accelerating glacier melt may be boosting water flow in the Aral Sea basin today, but at the cost of significant, and enduring, regional water shortages in the future. Such a scenario could spell the end Tajikistan's and the Kyrgyz Republic's hydropower prospects—ambitions for which feature heavily in these countries' development strategies. It could

[7] CA RRA interview in Dushanbe, 28.10.08.

also mean increased future reliance on fossil fuels, which could be difficult to reconcile with the importance of climate change mitigation.

International community responses

Tajikistan: Tajikistan's compound crisis during the winter of 2007-2008 offers a number of lessons for potentially improving how the international community manages the nexus of development and humanitarian programming. It is widely recognised that the international community in Tajikistan was slow to understand the nature, scope, and severity of the compound crisis. Since cold weather is normal in winter, it was hard to understand (or anticipate via early warning mechanisms) the complexities of the crisis's socio-economic impact. The agencies present in Tajikistan are engaged in development programming; few have the expertise or organisational structured needed to quickly switch to designing and implementing emergency response operations—particularly in harsh winter conditions. Developing a consensus about the nature and extent of the crisis took time and energy—both within the international community and vis-à-vis the government, which initially feared that acknowledging the existence of the compound crisis would underscore its failures to delivery basic services.

Donor coordination is often difficult, even in "normal" (i.e., non-emergency) circumstances. A number of factors—differing donor priorities, governance structures, and systems for project cycle management, accounting, and reporting; the need to publicise national donor activities, in order to justify ODA budgets to sometimes sceptical publics; the persistence of tied aid; different approaches to managing trade-offs between national ownership donor accountability; etc.—account for these difficulties. Donor coordination issues can be particularly difficult in circumstances (like Tajikistan's compound crisis) that have both development (e.g., inadequate energy sector reform) and humanitarian dimensions (e.g., the need for emergency responses to dangerously cold weather conditions).

A number of principles and mechanisms have been established to address these problems. The 2005 Paris Declaration emphasised the importance of capacity development and national ownership as key donor coordination principles. Instruments like the Joint Country Support Strategy (JCSS, for donors in a national setting), and the United Nations Development Assistance Framework (UNDAF, promoting the coordinated design [and, hopefully, implementation] of UN programming at the national level) are to provide more on-the-ground cohesion according to. The Hyogo framework (following the 2005 Kobe conference) emphasises the need to avoid artificial disconnects between emergency/post-crisis/humanitarian activities on the one hand and longer term development programming on the other. Under the leadership of the Office for the Coordination of Humanitarian Affairs (OCHA), UN agencies working in crisis settings are to organise themselves into thematic "clusters" that reflect the nature of the crisis (e.g., "food security"; "water, sanitation, and health"; "shelter"; "logistics") rather than (or in addition to) their traditional "development" thematic priorities.

Developments during (and, in some respects, since) Tajikistan's compound crisis during the winter of 2008 suggest that the effectiveness of these mechanisms leaves something to be desired. Specific problems encountered included:

- Difficulties in aligning the traditional UN "cluster" organisational approach to emergency responses with the:

- structures of the pre-existing Rapid Emergency Assessment and Coordination Team (REACT) in which representatives of both donors and government agencies participate; and

- appeals mechanisms necessary to quickly mobilise financial (and other) resources from within the UN system. For example, the funding for the flash appeal from the Central Emergency Response Fund (CERF) could not be provided until Fall 2008;

- The relatively small size of the UN presence in Tajikistan (particularly in terms of crisis prevention expertise), as well as (resource-based) limitations on the support that could be provided to the UN country team from OCHA's regional office in Almaty;

- Financial and administrative difficulties associated with:

  - identifying the appropriate intra-UN mechanisms and funding sources to finance the "scaling up" needed to respond to the emergency; and

  - adapting UN business practices to the need to use previously stockpiled emergency supplies (leading to the delay in accessing these supplies—or the failure to do so altogether);

- Donor disinterest in supporting disaster preparedness or contingency planning activities—despite the facts that:

  - projects in these areas could provide a natural bridge between "development" and "humanitarian" programming; and

  - disinterest in investments in crisis prevention can make much larger post-crisis outlays for response and recovery inevitable;

- The fact that the World Bank and some other large donors/partners did not fully participate in the UN-led emergency response coordination efforts—despite common JCSS membership.

The flash appeal that was launched in mid-February 2008 was the main tool for raising international awareness about the crisis and mobilising resources to respond. This appeal, which covered a six-month period, called for some $26 million. In the end, some $14 million (60% of the target) were mobilised through this mechanism; another $21 million were raised from other donors, outside of the flash appeal.[8] Some areas under the appeal (water, sanitation, and health; education and shelter) did not receive significant funding. This may have been due to difficulties experienced by some UN agencies to reposition themselves astride the nexus of humanitarian and development activities in their cluster areas.

The February 2008 flash appeal for Tajikistan has been followed by the design and submission of a revised appeal (in May) and then a food security appeal (in October). All three remain under-funded; and only the food security appeal seems to have effectively integrated

[8] For example, the World Bank in spring 2008 approved two emergency projects: one targeting the energy sector ($6.5 million), the other focusing on food security and seed imports ($5 million).

development and humanitarian approaches. Likewise, the on-going UNDAF process in Tajikistan, and work within the JCSS as well as within the framework of the government's national development strategy, seem to be only loosely aligned with the lessons learned from last winter's compound crisis.

***Kyrgyzstan*:** As in Tajikistan, the World Bank in the Kyrgyz Republic is providing a $5 million grant to finance emergency repairs of (and procure fuel for) the Bishkek thermal heating plant, and to provide fuel for the plant. The World Bank has also provided emergency grant funding to finance the purchase of seeds and fertilizers. USAID and other bilateral donors have also been active in this area. The UN Resident Coordinator in mid-October launched a comprehensive winter response contingency plan, which in many respects is more an appeal for funding concrete projects than a classical contingency plan. This *Winter Response Plan* seeks some $11 million "help seven United Nations agencies and nine NGOs support the Government of Kyrgyzstan in addressing the needs of the 250,000 most vulnerable people, as well as to undertake preparedness measures to ensure continuation of essential services".

While the *Winter Response Plan* bears a number of similarities with the responses developed in Tajikistan earlier this year (e.g., the cluster approach—"health", "water and sanitation", and "shelter"), it also reflects an effort to draw the appropriate lessons from the Tajikistani experience. In particular, the plan seeks to link (potential) short-term humanitarian activities with medium-term and longer-term development needs. Prospects for aligning the *Winter Response Plan* with the on-going UNDAF, JCSS, and Country Development Strategy documents likewise seem more favourable than is the case in Tajikistan.[9] While the winter contingency plan developed for Kyrgyzstan remains largely unfunded, this can presumably be ascribed to its nascent status.

Initial conclusions

The above analysis suggests the following conclusions:

- Water, energy, and food insecurities are now intensifying, in Central Asia. However, they have not yet been transformed into general macroeconomic instability in Tajikistan and the Kyrgyz Republic, nor have these tensions spread to other Central Asian countries. Whether these favourable trends continue—particularly in light of the unfolding global economic crisis, and the possible impact of the declines in electrical energy production on industrial output and of the drought on the 2008-2009 winter wheat crop—remains to be seen.

- The response to the compound crisis has therefore been appropriately concentrated in Tajikistan and, increasingly, in the Kyrgyz Republic. Important progress has been made within the context of these national responses, particularly in terms of rehabilitating and expanding electricity generation capacity. However, there are clearly reasons for concern about the response, in light of the on-going declines in electricity production, as well as of indications that the response measures put in place in Tajikistan have yet to fully "trickle down" to schools, hospitals, and water systems.

[9] As the current UNDAF covers the 2005-2010 period; work will begin in 2009 on its successor. The current JCSS likewise expires in 2010, while the current CDS covers the 2009-2011 period.

- Opportunities for closer alignment of UNDAF, JCSS, CDS/NDS processes need to be more closely examined by governments and donors—particularly in terms of their links between (potential) humanitarian and development activities.

- Development agencies active in Central Asia should increase their human resources and other capacities to engage in disaster prevention programming, either on a permanent on surge capacity basis. UNDP's decision to create a sub-regional office in Almaty, and to outpost staff from its Bureau of Crisis Prevention and Recovery there, should where possible be supported and followed other organisations.

- While the most important elements of the response to the emerging compound crisis should have a national character, the regional focus represented by the CA RRA's work should be continued, to *inter alia* provide continual monitoring of risks, especially as they pertain to cross-border linkages in such areas as remittances, water levels at power stations of regional significance, and the possible impact of the global financial crisis.

The following timetable is envisioned for the CA RRA's finalisation and subsequent launch activities:

- Mid-November: Presentation of a detailed first draft

- Mid-November to early December: Consultations with regional and national partners (including governments);

- December: CA RRA finalisation;

- January 2009: Formal launch of the assessment, with special focus on:

    - Raising awareness among policy makers and donors about the extent and severity of compound crisis phenomena in Central Asia; and

    - Mobilising resources in support of the under- or unfunded appeals in Tajikistan and the Kyrgyz Republic.