

High-tech, low-tech The plans for post-earthquake reconstruction in Armenia came to a standstill as the former Soviet Union broke up Now, like in so many countries, it is up to each family to secure their own future. In the harsh climate of the Caucasus, the gathering of fuel-wood has become a central part of daily life. To buy the fuel the family needs to survive the winter costs the equivalent of 14 months of the normal minimum wage. Armenia, 1993, Ian Berry/Magnum

Of course, the control exercised by the old Soviet authorities - whose systems are only slowly being replaced in the Caucasus through market reforms, especially in Azerbaijan means that local authorities can provide increasingly out-of-date lists of the names and addresses of every pensioner and disabled person for food parcel distribution but, in some places, getting a truck to deliver parcels still means a bureaucratic application to the same local authority for an allocation of transport, as efficient private firms are thin on the ground.

Among the millions in the Caucasus dubbed "social cases", pensioners are a good example of those made vulnerable by this crisis, having been previously protected to a limited extent by the communist State with low but universal benefits and free services, including medical care. Most of them were born from 1900 to 1930 into peasant-based agricultural societies with no welfare "nets" to catch those in need. Today their lives have reverted to destitution in societies whose transformation over 70 years began to dismantle the older support mechanisms of extended rural families, close communities and the church or mosque. Those without family or living alone are usually in the greatest need with the least re-

As agencies work at the margin, helping the victims of these economic and political disasters with food parcels, medical supplies and hygiene items, the greater needs in the Caucasus are increasingly structural and overwhelming - for jobs and money, peace, security and stability. Apart from the particular problems of Armenia's stretched supply lines, harvests have been poor so food is expensive and getting costlier by the day, forcing the State to provide an almost universal ration of bread, frequently made from wheat imported at high cost and paid for in hard currencv

Although rural populations may remain better fed, with many families laying down large stocks of pickled, salted and dried foods, agricultural production is being affected by the lack of fuel, machine parts, fertiliser and insecticide. With privatisation of agriculture and land high on the list of priorities for most newly-independent States, a new factor growing in all three countries is the resistance or outright refusal by farmers to sell their crops to the State at any price because they do not trust the new local currencies or even the rouble.

There are two particular factors common to all three countries which have a direct impact on both the ability of the governments to target and help the most vulnerable and on the level of assistance international humanitarian agencies can offer in support: information and coordination.

Under the Soviet system, information was tightly controlled and, while a great deal was collected, the flow of information was mainly one way: towards those in command. Despite commitments to democracy and more open government, information is still slowly collected, hard to obtain and sometimes of poor quality. That situation is worsening as the salaries and morale of many information collectors - such as doctors, civil servants and transport staff - fall, while conflict and mass population movements make observation and reporting far harder

But a time of rapid change is when good quality, recent information is most valuable, especially in disasters where swift decision-making frequently saves lives. In the Caucasus, limited information about food, fuel and drugs - or, more importantly, about hunger, cold and disease - is making many more people increasingly vulnerable and limiting what both government and international agencies can do.

Even with better information, the effective coordination of government and humanitarian agencies, and their relief operations, is crucial, yet in each country there is a plethora of ministries and organisations whose responsibilities and roles overlap or leave gaps, while the individuals charged with ensuring that well-coordinated action is taken have been given too little authority to do a fully-effective job.

Azerbijan

In recent years Azerbijan has had the largest overall economy of the three countries, with a US\$12 billion gross national product in 1991, though its population of 7.21 million means that the per capita figure of US\$1,670 is only just ahead of neighbouring Georgia. The economy has been buoyed up by oil, and its most recent plans for offshore oil production are estimated by international production companies to be worth up to US\$130 billion over the next 30 years, of which Azerbaijan would receive at least US\$30 billion, far more if it shares some of the development

This should have allowed a more comfortable transition to a market economy than most of the former Soviet Union, but the long-running conflict with Armenia over the disputed enclave of Nagorno-Karabakh is putting all development at risk. Up to 750,000 people have been displaced by fighting, one-third of arable land is now unproductive, and the human suffering has been matched by material destruction. More than five years of war have destroyed at least 46 hospitals, 600 schools and kindergartens, hundreds of health posts, and many thousands of homes.

As an oil producer and cotton growing country, with a damaged agricultural sector, Azerbaijan has a substantial, structural food deficit, especially in grain, sugar and milk products. With limited foreign exchange, barter trading of oil has met some of the gap but exchange shortages for feed-grains and the denial of upland summer grazing in and around Nagorno-Karabakh has also forced a major decline in livestock

The country's recent per capita spending on health care has been the lowest in the former Soviet Union, and the influx of refugees and displaced people has brought a significant decline in the general health status, from worsening environmental and water quality to outbreaks of measles, diphtheria, tuberculosis and polio as previously high levels of child immunisation have

been disrupted by shortages of imported vaccines.

The oil industry means that urban Azerbaijan has the highest levels of air and water pollution of all the former Soviet republics. Acute respiratory infections are the most prevalent diseases among Azeri children treated in health institutions, and are the cause of 55% of all infant deaths.

While the number of social cases among pensioners, large families and the unemployed is climbing in Azerbaijan, the most vulnerable group remains the hundreds of thousands of displaced people and refugees crowded into communal buildings, such as schools, or living with relatives. Despite government efforts, supported by the small number of international agencies which have recently begun operating in the country, insanitary conditions are exacerbated by shortages of clothing, blankets and medical supplies, while harsh winter conditions have brought considerable hardship.

Georgia

Georgia's economic statistics cannot keep up with the reality of collapse, as the loss of old markets, the end of Soviet support and sudden civil wars are destroying the country's capacity to look after the most vulnerable. The 1991 gross national product of US\$9 billion - US\$1,640 per capita for a population of 5.48 million - has declined by at least 25% in the face of industrial collapse, agricultural contraction and inflation of several thousand per cent a year.

Like people, countries can be vulnerable, and, without the Soviet Union, Georgia's national vulnerability was exposed: tourism has disappeared, its trade in tea, fruit, tobacco and cotton with other Soviet republics - once 95% of exports and 75% of imports - has collapsed, while its role as a centre of light industry also depended on captive markets and imports of raw materials and energy. Being positioned in an earthquakeprone zone brings other risks: two earthquakes since 1991 have damaged agricultural production, especially of grain.

At the same time, the legacy of past boundary decisions which left resentment among ethnic minorities has now prompted a series of conflicts in Georgia, in South Ossetia, Abkhazia and the western area close to the Black Sea, each of them bringing new flows of refugees and displaced people, and disrupting communications, rail transport, the country's main Black Sea ports, food deliveries and energy supplies, almost all of which have to come over or around the barrier of the Caucasus mountains.

With sharply-declining domestic agriculture and livestock, and a lack of foreign exchange for imports, food supplies have fallen and inflation has climbed. Despite rationing of bread, and with it long queues, the purchasing power of the most vulnerable has been cut back so far that they can barely afford vegetables; international agencies and the Georgian Red Cross Society are now playing a major role in keeping alive hundreds of thousands of people.

Georgia once had a good health care system with high levels of child immunisation. Today drugs shortages, the economic decline and conflict have badly damaged health and welfare systems. Once normal deliveries of vaccines failed in 1991 and 1992, immunisation rates fell from up to 80% for major diseases to as low as 45% in some cases.

The shift from a centralist economy to a market economy included plans to create a new Georgian currency. The transitional coupon was introduced in April 1993, with a conversion rate of one-to-one with the rouble. By the end of the year, the rouble itself had further fallen in value, while the coupon: rouble exchange rate was 30:1. In less than a year, the 4,500 roubles a month earned by the head of a government ministry went from being a reasonable salary to being worth US\$4.

Armenia

Armenia is the smallest country in the Caucasus - 30,000 sq km, against Georgia's 70,000 sq km and Azerbaijan's 87,000 sq km - with the

smallest population, at 3.6 million, and the smallest overall economy, at US\$7.23 billion in 1991, but the highest per capita figure, at US\$2,150.

It has been the worst-affected of the Caucasus States, with a devastating combination of natural disaster, economic collapse, war and blockade. Since it was not self-sufficient in agriculture, energy or other needs, this has led to declining supplies of food, drugs, raw materials, spare parts and fuel. Despite increased harvests of potatoes and other vegetables, poor weather and fuel shortages have cut grain harvests in recent years, while limited animal feed, fewer animals and lower productivity helped reduce the 1992 meat output by 40% and milk by almost 30%. Eggs production has been halved.

Armenia has a longer experience of working with humanitarian agencies than most of the former Soviet Union, as the earthquake on 7 December 1988 in the north-west of the country prompted a flood of international aid. Up to 25,000 people died in the earthquake, which badly damaged industry and energy infrastructure, thousands were injured and perhaps 100,000 people made homeless. An unfulfilled Soviet promises of rebuilding has left the towns of Gumri and Spitak with many thousands of families living in shacks amid ruins while rusting cranes stand idle beside halfcompleted blocks of flats.

The conflict over Nagorno-Karabakh, the Azeri territory mainly populated by people of Armenian ethnic identity, has lasted more than five years and shows no sign of being resolved, with Armenian forces making major territorial gains. As well as the flow of refugees and people displaced by fighting, Armenia has been devastated by the shut down of Azerbaijan fuel supplies and the tight de facto blockade imposed along the Armenian-Turkish order, while insecurity in Georgia immediately puts Armenia's transport links at risk.

While Armenia has seen the start of private health insurance for those who can afford it, the state system is in decline and life expectancy has even fallen in recent years. Drug shortages, the conditions for refugees

and displaced people, a collapse in vaccine supply and a poor quality cold chain, and risks from poorlymaintained water systems all increase health vulnerability, especially for the young, old and mothers. Nutrition is suffering, especially since the official bread ration of 250 grammes a day per person supplies barely 800 of the 2,000 calories required for long-term maintenance of body weight, while a survey in July 1993 showed the then minimum wage of 4,200 roubles a month covered only one tenth of the cost of a subsistence food basket giving a balanced diet.

Health can also be affected by cold, and fuel shortages mean few Armenians can stay warm. Fuel shortages affect all electricity generation, leading to power cuts even for hospitals and grain mills, and put water supplies and quality at risk. The lack of fuel means that most private homes have no centralised heating system, and must rely on wood or kerosene at enormous cost.

A survey in August 1993, looking at the severe winter to come, suggested that at the prices then being

Beets

Black peas

Cabbage

Onions

Parsley

Potatoes

Tomatoes

Cucumbers

charged a family would need 50,000-75,000 roubles or 12-18 times the minimum monthly wage to lay in a stock of wood to stay warm through the winter. For kerosene, costs were even higher three litres a day for the 120 coldest days would cost at least 250,000 roubles: 60 times the monthly minimum wage.

Item	Percentage price increase in 12 months
Salt	500
Soap	192
Sugar	1,000
Beef	1,667
Cheese	1,100
Eggs	500
Lamb	200
Macaroni	355
Green onions	1,250
Carrots	1,833
Peppers	1,500

Rising Food costs in the Caucasus

Between July 1992 and July 1993 the price of many items of food increased more than 10fold. At these prices, many of the most vulnerable people become totally reliant upon relief-food for survival.

Source: IOM/usaid report 1993

667

220

600

3,333

2,000

5,000

1,375

750