

**PRELIMINARY DRAFT**

**REGIONAL STRATEGY UPDATE  
FOR AGRICULTURE DEVELOPMENT AND FOOD SECURITY  
IN MEMBER COUNTRIES OF THE ECONOMIC COOPERATION ORGANIZATION**

**ECO**

**(Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan,  
Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, Uzbekistan)**

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## PRELIMINARY DRAFT

### THE ECONOMIC COOPERATION ORGANIZATION (ECO)

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## Executive Summary

The Economic Cooperation Organization (ECO), an inter-governmental organization comprising Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan, have identified regional food security as one of the primary concerns. The ten ECO member states now cover a region of 7.9 million square kilometers inhabited in 2001 by more than 363 million people of common cultural heritage. The population is growing at an average annual rate of 1.72 percent. Although the average daily caloric supply per caput in the ECO member states was relatively high (2,700 kcal in 1994-1996), and declined to reach 2572 kcal in 1997-1999 (Lower than the developing countries level of 2680 kcal), there are significant variations among countries and within each country. An upper limit of 3490 kcal was reported in Turkey and a lowest level of 1800 kcal in Afghanistan).

Food security and sustainable agricultural development have been long-standing and major goals of the ECO countries. Despite the magnificent growth in agricultural production, especially for cereals (Over 88 million metric tons in 2001) together with the considerable improvement in infrastructure, distribution and social services, in some countries, the ECO countries are still far from being self sufficient in food production and most are net food importers. There was evidence that some improvement in domestic food output have taken place in these countries, especially in producing wheat, rice, barley, sugar cane, cotton, meat, milk and eggs.

While the incidence of poverty is not well known, evidence suggests the existence of poverty and food insecurity among some segments of the population and even in countries with relatively high income levels. Nomadic population with small herds, desert shepherds, landless labourers, families with small land holdings in rainfed areas and the unemployed urban population face occasional food security risks.

Agriculture sector has been major economic contributor to national economy of the ECO member countries. According to FAO estimates, agriculture generates 23.4% of GDP and employs 42% of the economically active population in the ECO region in 2000. The average annual growth in agricultural GDP reached 5.8% in 1999-2000. The industrial sector share to GDP in ECO region reached 30.4% in 2000 (A highest rate was 50% in Turkmenistan and the lowest was 1.9% in Uzbekistan), with an average annual growth of 10% in 1999-2000. However, there are variations among the countries within the region. While as high as 39.4 percent of the Kyrgyzstan's GDP comes from agriculture and forestry, only 9.2% of the Kazakhstan's GDP is generated in these sectors. However, the relatively low level of only 26% land being cultivated in 2000 as compared to 49% potential cultivable area indicates the prospects for increasing agricultural production through both intensification of farming and expansion of cultivated area.

Food imports in ECO region valued about US\$ 10.00 million in 1999, and declined dramatically to reach about US\$ 6.00 million in 2000. Total exports (fob) in ECO countries reached US\$ 69.60 million in 2000, meanwhile the reported total imports (cif) was US\$ 83.0 million with a net deficit of about US\$ 13.34 million. Major farm products of the ECO member countries in 2001 were wheat, sugar cane, sugar beets, seed cotton, potatoes, tomatoes, barley, rice, meat, milk, and milk products.

In general ECO countries have good potential to further develop their agriculture and enhance their food security. The FAO Special Programme for Food Security (SPFS) is already operational in Pakistan and is under formulation in three other ECO countries. The national food security strategies elaborated as a follow up to the World Food Summit emphasised the need to improve land fertility, increase irrigation efficiency, raise crop and livestock productivity, streamline market and price policies for agricultural inputs and outputs, strengthen research and extension and rationalise the credit system in support of market-oriented agriculture. In order to make agriculture more efficient and to provide a better environment for regional food security, policy and institutional reforms are essential.

Comprehensive estimates of investment needs for agricultural development up to 2010 for ECO as a whole are not yet available. However, the aggregate investment needs of four ECO major countries (accounting for more than 80% of ECO's population) indicate requirements of some US\$158,000 million for the period 1998-2010, including US\$18,000 million for irrigation, US\$56,000 million for agro-industry and marketing and approximately US\$20,000 million for animal production. Special efforts will be required to secure financial resources to the extent needed for the achievement of food security objectives.

The fact that several agreements have already been signed in support of the Special Programme for Food Security is encouraging in this context. However, a vigorous effort of resources mobilisation from ECO member states and the international community is required. As some countries (Uzbekistan, Kazakhstan, and Turkmenistan) may be interested to pursue regional economic cooperation through organizations and modalities other than the ECO, it is suggested to prepare a conceptual strategy for Food Security for 5 Central Asian Countries only.

To achieve food security there are several emerging issues including volatile cereal prices, growing water security, declining soil fertility, escalating concerns about food safety, weather fluctuation and climate change and trade liberalization issues. These issues could better be tackled through strengthened cooperation among the ECO Member Countries in the region. Many of the above mentioned activities could be undertaken within the framework of a "Regional Programme for Food Security in the member countries of the ECO".

In 1990's, most ECO Governments initiated policy reform processes to aid transformation to more market-oriented economy with significant macroeconomic policy changes. The governments of the countries are fully aware of the constraints facing their economies during the process of transition. Initiatives have been taken to create a healthy and viable macro-economic system and to overcome the stagnation of the agricultural sector.

## 1. THE SETTING

### 1.1 Food Security<sup>1</sup>

Long-standing and major goals of food security and sustainable agricultural development the ECO countries featured highly particularly following the beginning of world food crisis in the mid 1970s and the World Food Summit -1996. Despite the considerable growth in agricultural production, especially for cereals (Over 88 million metric tons in 2001) together with the considerable improvement in infrastructure, distribution and social services, in some countries, most of the ECO countries are still far from being self sufficient in food production and are net food importers. There was evidence that some improvement in domestic food output have taken place in these countries, especially in producing wheat, rice, barley, sugar cane, cotton, meat, milk and eggs.

#### Food Demand and Nutritional Needs

In 2001, the population of the ten member countries of the Economic Cooperation Organization (ECO) was estimated at 363 million, growing at an average annual rate of 1.72 percent. Although the average daily caloric supply per caput in the ECO member states was relatively high (2,700 kcal in 1994-1996), and declined to reach 2572 kcal in 1997-2000 (Lower than the developing countries level of 2680 kcal), there are significant variations among countries (upper limit of 3490 kcal was reported in Turkey and a lowest level of 1800 kcal in Afghanistan) and within each country.

The Economic Cooperation Organization (ECO)<sup>2</sup> has achieved mixed results with regard to food supply and consumption. The average daily calorie supply per caput amounted to 2,572 kcal in the 1997-1999 period<sup>3</sup>, but wide variations exist among member countries, ranging between 1,800 kcal in Afghanistan and 3,490 kcal in Turkey. Three countries were above the threshold of 3,000 kcal: Iran, Kazakhstan, and Turkey. The remaining five countries were below 2,500 kcal. Six of the ECO member countries are rated as low-income food deficit countries (LIFDCs) namely: Afghanistan, Azerbaijan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan.

ECO countries with an abundance of agricultural resources and blessed with different types of soil, climatic and environmental conditions suitable for the different varieties and types of the agricultural products offer a great potential for the development of the agricultural sector and ensuring food security. However, there are wide variations among member countries with regard to level of rural development and food availability. Reform of

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<sup>1</sup> The source for all data concerning production, consumption and trade of agricultural products is FAO. For other data, sources are specified in the reference tables.

<sup>2</sup> The ECO which was established in January 1985 is successor to the former Regional Cooperation for Development (RCD). It is composed of ten Governments: Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan.

<sup>3</sup> An average 2,700 kcal per caput/day is roughly estimated to be necessary to satisfy the food needs of the vast majority of the population.

the agricultural sector in Central Asian and Caucasian countries of ECO experienced enormous difficulties partly due to limited institutional capacity, and eventual decline of agricultural production during 1990s.

**Table 1. ECO: Population, Per Caput Dietary Energy Supply, and Prevalence of Undernourishment, 1997-1999.**

Country	Population (Million)	Per Caput Dietary Energy Supply (Kcal/day)	Undernourished	
			number in millions	% to total population
<b>Afghanistan</b>	20.8	1800	12.1	58
<b>Azerbaijan</b>	7.9	2130	2.9	37
<b>Iran</b>	68.1	2930	3.5	5
<b>Kazakhstan</b>	16.3	2610	1.7	10
<b>Kyrgyzstan</b>	4.8	2730	0.5	11
<b>Pakistan</b>	133.9	2480	24.4	18
<b>Tajikistan</b>	6.0	1980	2.8	47
<b>Turkey</b>	64.6	3490	1.2	-
<b>Turkmenistan</b>	4.5	2660	0.4	9
<b>Uzbekistan</b>	24.1	2910	0.9	4
<b>ECO</b>	351.0	2572	50.4	14
<b>Developing Countries</b>	4565.5	2680	777.2	17

Source: The State of Food Insecurity in the World, 2001, FAO.

### **Food Insecurity and Poverty**

The undernourished population in ECO region is estimated at 14% of the total population with marked variation among countries. In Afghanistan, for example, almost 60% of population suffers from hunger. The incidence of poverty and hunger is more in the rural areas of ECO region specially among women and children, nomadic populations, and refugees as a result of civil conflicts.

The achievement of food security is hampered by the volatile cereal prices, growing water scarcity, declining soil fertility, escalating concerns about food safety, weather fluctuation, climate change and trade liberalization issues. These issues could better be tackled through strengthened cooperation among the ECO Member Countries in the region. With an area of over 7.9 million sq. km occupying 5.9 percent of world area and inhabited by more than 350 million people, ECO region represents diverse socio-economic conditions with common cultural heritage. While Afghanistan is one of the most food insecure countries in the region, six member countries in the Central Asia and Caucasus region are in transition process from centrally planned to market economy and have become vulnerable for food security in the transition phase.

Iran, Pakistan and Turkey on the other hand are relatively better off in terms of food security due to satisfactory increase in production and productivity of food grains and other agricultural products during the last decade. However, variations in these parameters and in nutritional status widely prevail within these countries. Furthermore, these countries face different challenges and problems related to environment, infrastructure and maintaining

efficiency in production and distribution processes including provision of efficient marketing information, and coordination mechanisms among several sectors within and between neighboring countries.

According to FAO estimates, the proportion of undernourished population ranges from 73% in Afghanistan to 17% in Pakistan and only 3% in Turkey. Women and children are the most vulnerable groups. In the rural areas, the poor are mainly peasants with little or no land and agricultural labourers.

There is a concentration of poverty among nomadic populations with small herds and semi-arid-land shepherds. A smaller group of extremely poor includes widows, sick and disabled older people, who depend heavily on direct state support. Malnutrition and lack of medical services, especially in rural areas remains a serious health problem in some ECO countries where under- as well as over-nourishment are found. Under-nourishment (stunting) and micronutrient deficiencies are prevalent in rural areas. Iron deficiency anemia is a common problem, goitre is endemic and rickets and other nutritional deficiencies, for example zinc, are also found.

## **1.2 Policy and Programme Highlights**

### **Economic and Institutional Policies**

The main goal of the Economic Cooperation Organization (ECO), is to promote regional cooperation in trade, transportation, communications, tourism, cultural affairs, and economic development. Its specific objectives include: (i) promoting conditions for sustainable economic development; (ii) removing trade barriers within ECO; (iii) providing for the gradual and smooth integration of the economies of Member States; (iv) promoting cooperation in social, cultural and scientific fields; (v) promoting economic liberalisation and privatisation, including joint ventures; (vi) intensifying the utilisation of ECO's natural resources; (vii) facilitating co-operation in environmental protection and (viii) enhancing efforts for the effective utilisation of agricultural and industrial potential.

Equally important are the institutional and support services related to food security in the region. In Azerbaijan and other Central Asian Countries, major reforms in land tenure measures such as changes from the collective and state ownership to private ownership modes are taking place and these transition processes call for experience sharing among the ECO countries with clearly spelled out property rights and local level governing institutions in place. Economic reforms and structural adjustment programmes were undertaken by most Governments of ECO in the 1990s, in order to *inter alia*: (i) reduce the role of the state and strengthen the market-based economic system; (ii) improve the regulatory environment for the private sector; and (iii) correct large distortions in the price structure

Several Commonwealth of Independent States (CIS)<sup>4</sup> Governments, as well as Iran, have initiated a privatization programme with a view to enhancing the role of the private sector and improving the efficiency of the economy. Public sector enterprises have been removed from the control of ministries and restructured as affiliates under diversified financially independent holding companies.

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<sup>4</sup> Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan are CIS countries which are members of ECO.

However, the private sector still has very little borrowing capacity, in particular very limited fixed capital to pledge and virtually no working capital to operate. Programmes aimed at favoring private initiative (in particular through credit) should take these constraints into account and assist farmers and agro-food entrepreneurs to build up their operations on a sound basis.

Similarly, a major programme of land reform is well advanced in several countries of the CIS. This process is still under way and the structure of ownership and the farm size that will emerge is not yet known. It seems that the distribution of other agricultural assets (for example machinery) is less advanced and is more problematical insofar as some items cannot be physically separated. Almost everywhere, land tenure security remains a major bottleneck for the enhancement of production and the promotion of sustainable agricultural enterprises.

Little information exists on the exact status of the privatization process. Given the difficulties of the economic environment and the weight of decades of command economy in the former USSR, the beneficiaries of the on-going reforms often find themselves unable to take advantage of their newly acquired property. State and collective farms are independent entities but remain generally under the state control, though deprived of subsidies and any other form of state assistance.

## **Social Policies and Programmes**

The social security system in the CIS countries of ECO, as inherited from the former Soviet Union, was characterized by wide eligibility for categorically allocated benefits without targeting vulnerable groups. As a result, in some cases, half of the total population used to receive benefits of one kind or another (mostly pensions or child allowances).

As part of the reform programmes, most Governments have recognized the need for major changes in the system of social protection, in particular the necessity to target support to those most in need. The latter will probably include a large number of unemployed, as it is likely that much of the current hidden unemployment will become progressively open.

Care should be taken that structural adjustment measures do not lead to drastic cuts in expenditures on basic services such as health and education. However, health services have already suffered from funding cutbacks, major logistical problems, and the exodus of professionals to other countries. Therefore, more external assistance may be needed during the transition process to compensate for such losses.

## **1.3 The Agricultural Sector**

### **Agriculture in the Economy**

Agriculture remains an important sector in the economies of ECO countries, particularly in terms of employment. In 2000, the agricultural labour force amounted to 42% of the total labour force. The share of agriculture in total GDP ranged from more than 39% in Kyrgyzstan to below 10% in Kazakhstan, reached 19.6% for Iran and ranged between 20-35% for the remaining five ECO countries in 2000. Along with basic food, the sector is a supplier of high quality yarn, woolen products, silk, honey, fruits and vegetables. The share of industry in ECO countries GDP's ranges between 50% for Turkmenistan and 22.8% for Pakistan according to World Bank statistics in 2000.

Food imports in ECO region were valued at US\$ 9,588 million in 1999, and declined dramatically to reach US\$ 5,939 million in 2000. Total exports (fob) in ECO countries reached US\$ 69,643 million in 2000, meanwhile the reported total imports (cif) was US\$ 83,016 million with a net deficit of about US\$ 13,373 million. In general, total exports of the ECO region cover about 83.9% of its total imports in 2000. Major farm products of the ECO member countries in 2001 were wheat, sugar cane, sugar beets, seed cotton, potatoes, tomatoes, barley, rice, meat, milk, and milk products.

In 1999 total agricultural exports of the ECO member countries valued at US\$ 8,728 million accounted for 14% of total merchandise exports. Exports of agricultural products (primary and processed goods) have declined since the early 1990's. In many cases, the decline in productivity (due mainly to lack of adequate input application) combined with deterioration in the terms of trade has forced many farmers in the CIS countries to retreat from commercial production to self-sufficiency.

**Table 2. ECO: Selected Economic Indicators, 2000.**

Country	Urbanization Rate (%)	Agriculture (% of GDP)	Industry (% of GDP)	Food Imports (US\$ million)	GNI (US\$ million)	GNI per Caput (US\$)
Afghanistan*	21.9	-	-	-	-	-
Azerbaijan	57.3	18.9	37.9	205	4.9	600
Iran	61.6	19.6	24.4	2,427	106.7	1,680
Kazakhstan	56.4	9.2	39.4	466	18.8	1,260
Kyrgyzstan	33.3	39.3	26.4	61	1.3	270
Pakistan	37.0	26.5	22.8	896	61.0	440
Tajikistan	27.5	19.4	25.7	68	1.1	1,800
Turkey	75.3	15.8	25.0	1,263	202.1	3,100
Turkmenistan	44.8	27.3	50.0	192	3.9	750
Uzbekistan	36.9	34.9	23.0	361	8.8	360
ECO				5,939		1,140

\* No data available for Afghanistan

Source: World Bank: World Development Indicators Database, April 2002

### **Land Use, Farming Systems and Institutions**

Total land area of ECO member countries is some 794 million ha. Arable land plus permanent crops cover some 117 million ha (1999) of which 42.1 million ha were covered by full or partial irrigation. Permanent pastures consisted of some 342.5 million ha in 1999.

The cropping pattern in ECO countries in 2001 was dominated by cereals (49.79 million ha), particularly wheat. Less important in land size are barley, rice, tomatoes, and potatoes. Coarse grains cover 10.2 million ha, Pulses cover 3.4 million ha, vegetables 2.4 million ha and fruits 1.4 million ha in 2001. Cotton, with 6.3 million ha, is the major industrial crop.

In the northern parts of the ECO, there has been a transition in farming systems and land tenure, from a situation where most farms were state or collectively owned to a situation where private ownership and management is favoured. So far, the on-going reform has led to a variety of situations, from privately owned small farms to associations of farmers formed on voluntary basis. In all the CIS countries, irrigation was favoured under the former Soviet Union, which resulted in 80% of all the cultivated land being fully or partially irrigated. In the southern parts of ECO, farms are cultivated under three land tenure systems: some are directly cultivated by owners, others are partly cultivated by owners and partly by tenants, and the remaining farms are cultivated entirely by sharecroppers. Land fragmentation is frequently a major constraint on agricultural production. Farms are particularly small in Pakistan (the average size decreased from 5.26 ha in 1972 to 4.68 ha in 1980 and 3.78 ha in 1990). The extremes of low rainfall areas are found in southern Afghanistan and Iran and in parts of Pakistan, where agriculture is largely dependent on irrigation. In Iran, about 40% of the total arable land is being cultivated under modern or traditional irrigation systems. In some parts of the region, particularly in Pakistan, the lowering of the water tables has become a major concern.

Livestock production in the ECO countries is predominately based on traditional systems. These include small farmers who raise small herds of cattle, sheep and goats in villages and small towns for their household requirements of milk and meat. Under this system, animals are fed mainly on crop residues, and concentrates are usually not given. Sheep and goats are raised in larger flocks by nomads and transhumant tribes in the steppes. They depend mainly on rangeland but in dry years they move closer to crop areas to graze agricultural by-products. The severe shortage of feed has encouraged many farmers to move towards an integrated system of farming in which forage production (berseem, alfalfa and green barley) are assuming increasing importance.

The institutional structure for agriculture usually includes the Ministries of Agriculture and the Ministries of Water, both having responsibilities for the planning and implementation of development activities. Other public institutions normally cover agricultural marketing, credit, research and extension organizations. The private sector is increasingly involved (or starts to be involved for CIS countries) in agricultural marketing and processing, as well as in the importation and sale of farm inputs.

### **1.3 Recent Performance**

The performance of agriculture during the 1990s has been uneven across countries, but generally disappointing, particularly in the CIS countries. Iran, Turkey and Pakistan have had satisfactory results. For the ECO as a group, per caput food production virtually stagnated throughout the 1990s. The overall agricultural area index in the ECO region has risen from 95.8% in 1997 to reach 102% in 2001. While it was 138%, 86.2%, 96.6%, 107.2%, 67.7% for the output of cereals, crops, food, livestock, and non food, respectively in 2001 (1989/91=100).

In some member countries of the ECO, the poor performance of agriculture reflected the considerable difficulties that the sector and most farmers had to face during the transition process. The absence of solvent markets for output has frequently been an important obstacle.

On the production side, the lack of working capital has severely constrained access to good quality seeds and agricultural inputs.

In many cases the use of chemical fertilizers has dropped to levels ten times lower than in the period before 1990. The renting out of machinery, despite its low rates and maintenance costs not being covered, also proves problematic. Most of the aging fleet, typically over 10-year old and some items approaching 25 years, is still retained in large centralized pools under the control of ex-collective or state farms, which put individual farmers at a disadvantage.

In terms of agricultural production, wheat was dominating the cropping pattern in 2001 in ECO countries with 60,721 metric tons. While it was 45,506 metric tons for sugar cane, 22,321 metric tons for sugar beets, 14,492 metric tons for seed cotton, 14,431 metric tons for potatoes, 12,572 metric tons for tomatoes, 11,002 metric tons for barley, and 9,891 metric tons for rice. Total meat production was 17,275 metric tons, while it was 46,246 metric tons for milk and milk products in ECO region in 2001.

The general tendency in recent years has been to increase the area planted to wheat (used both for food and barter purposes) at the expense of forage, feed grains, cotton and vegetables. Average wheat yields have declined steadily as additional marginal land was brought into production, while investment in farm machinery, supply of spare parts and inputs was sharply reduced.

As far as trade is concerned, agricultural exports declined from US\$10,700 million in 1996 to US\$ 8,728 US\$ 10,700 million in 1999, the main items being cotton lint, tobacco leaves and milled paddy rice. In 1999, total agricultural imports valued at US\$9,588 million, the main items being wheat, palm oil and refined sugar.

## **1.5 Government's Sectoral Objectives, Policies and Programmes**

In the 1990's, the ECO Governments initiated a policy reform process aimed at achieving a more market-oriented economy with significant macroeconomic policy changes. The governments of the countries are fully aware of the constraints facing their economies during the process of transition. Initiatives have been taken to create a healthy and viable macro-economic system and to overcome the stagnation of the agricultural sector. However, the agricultural policy reform process still faces major problems and constraints due to the partial nature of the reform process and their need for a completely new role of Government intervention, a role which has not been fully identified yet.

The agricultural strategies of ECO Governments, as articulated in programmes and policies, emphasis self sufficiency in basic food products (more so in Iran), while at the same time stressing the importance of promoting the production of export crops. CIS countries, in particular, are engaged in structural reform with the aim of liberalising their economies. The measures introduced so far include the elimination of export taxes on agricultural products and of price controls, especially on food items and energy. However, many problems continue to hamper the efficient functioning of markets. Market information is not circulating properly, seasonal and long-term credit is scarce and poorly distributed, new networks for input distribution are not functioning properly and land ownership reform and land utilisation remains a difficult undertaking. Furthermore, as most agro-industrial enterprises are in difficulty, there are few solvent outlets for agricultural output.

## **Common Issues and Development Priorities**

The main issues and constraints faced by the reform process of agriculture and livestock policies in ECO Countries can be identified as: a) inadequacy of the current institutional framework to operate in a reformed policy scenario; b) extremely limited capacity to perform short and medium term agriculture and livestock policy analyses and provide technical support to their policy decision making; c) macro-economics constraints; d) most of the economic decisions affecting farming seems to be based on limited information, specially with regard to farm data on production costs of crops and livestock; e) the food security policies of the past concentrated on enhancing self-sufficiency at the expense of the long-term productivity of natural resources and ECO Countries comparative advantage in the production.

In line with an endeavour to refrain from interfering in production choices and leave the options to the farmers, several Governments tend to focus their intervention more on providing farmers with the best possible technical, administrative and regulatory support, along with adequate market infrastructures and services. The main lines of public financing are discussed below (Agricultural Production, Promotion Policies and Programmes). It is recognised that these forms of support are prerequisites for the achievement of national food security, whatever the relative importance in national strategies of domestic production for increasing self-sufficiency or of a competitive export sector to generate additional income, employment and foreign exchange.

To date, no common fisheries policy has been elaborated among CIS countries bordering the Caspian sea. Co-ordination is achieved through bilateral and multilateral agreements among the member countries regarding inland water fisheries and aquaculture activities. Most CIS countries have concentrated on the restructuring of their fleets and on the processing and marketing sectors under structural adjustment schemes.

## **Rural Poverty and Household Food Security Objectives**

Rural populations, particularly those in remote areas with less agricultural potential, are particularly vulnerable to malnutrition, if not under-nourishment. Rural poverty and food insecurity have been compounded in recent years by the poor performances of the agricultural sector, particularly in CIS countries. In many cases, farmers favour productions that can be either immediately used for the consumption needs of the family (e.g. potatoes) or that can be easily sold (wheat), without much consideration for expanding markets or developing competitiveness. This response to the current hardship of the transition period in CIS countries is likely to continue until the demand for agricultural products strengthens, farmers develop working capital and the inputs and output markets begin to function properly. In this respect, the development of farmer-oriented extension networks, coupled with a system of adaptive research, would be of great help.

In other ECO member countries the strategies to improve economic access to food include higher wages, lower prices, generation of new sources of income and national programmes for poverty alleviation, including land reform and land distribution.

For ECO as a group, food aid in cereals has fluctuated between 593,000 metric tons in 1993-94 to 499,600 metric tons in 1997-98 which is equivalent to 4.9% to 3.3 % of the total

commercial imports of cereals. Cereal food aid has been much higher in proportion in peak years for the Kyrgyzstan (93.2%), Kazakhstan (166.7%) and Azerbaijan (97.6%).

### **Agricultural Production, Promotion Policies and Programmes**

In the context of macroeconomic reform, public production promotion policies emphasize liberalizing the agricultural sector whereby growth in output is to come primarily from the private sector supported by selected state investment financing. In most ECO countries such public financing focuses on the following: agricultural research and extension with priority for cereals and cotton; investment in infrastructure and the promotion of farm or village level processing and storage facilities for farm products; construction of feeder roads to farms after restructuring; soil and water conservation measures and rehabilitation of irrigation systems; support for the livestock subsector through genetic improvement and health interventions and the prevention of pests and diseases.

Since 1994 FAO has launched the Special Programme for Food Security (SPFS) targeted towards low income, food deficit countries (LIFDCs). At present, Phase I of SPFS is operational in Pakistan. Furthermore SPFS is under formulation in three countries: Kyrgyzstan, Turkmenistan and Azerbaijan. Agreements for support to SPFS have been signed with the World Bank, Islamic Development Bank and the United Nations Development Programme (UNDP). Agreements are in course of negotiation with other financial institutions. The programme also benefits from technical assistance in the framework of South-South co-operation, mobilizing about one hundred experts by country.

The results of Phase I throughout the developing world are promising, and give hope for increased resorting to the SPFS approach in agricultural development projects that aim to increase food production and productivity, while reducing the year-to-year variability of production, and improving access to food through a multidisciplinary participatory approach on an economically and ecologically sustainable basis. Particular attention is paid to the socio-economic constraints that prevent farmers from adopting the technologies and methods offered in terms of different irrigation systems, intensification of crop production and diversification of production systems.

### **Prospects for Trade in Agricultural Products**

The contribution of agriculture to the ECO's trade in 1999 was about 29.2% of the value of total merchandise exports. Although intra-regional trade among ECO countries is still small (about 4% of total exports), the share of agriculture in intra-regional trade is fairly significant, about 21%. Thus while the share of agriculture in total exports has declined since the 1980s its share in intra-regional trade has increased during the same period.

There is much potential for ECO member countries in further harmonizing tariffs and eliminating barriers to trade. At present, only Turkey, Kyrgystan and Pakistan are WTO members. Iran has been considering the possibility of its WTO membership over the past years.

Article III of the Treaty of Izmir obliges the ECO members to examine 'the possibility of ensuring the fullest possible reduction of trade barriers in the ECO area at an appropriate time in the light of the experience to be gained within the ECO Preferential Tariff System

without prejudice to other international commitments undertaken by the Member States'. The ECO Preferential Tariff Arrangement, signed on 23 May 1991 in Teheran, was notified to the General Agreement on Tariff and Trade (GATT) on 10 July 1992. This Protocol is limited to three countries (the Islamic Republic of Iran, Pakistan and Turkey). The preferential tariff arrangement is considered as a first step towards eventual elimination of trade barriers among members. A comprehensive set of rules called "the ECO Rules of Origin" has been agreed containing origin requirements and customs house procedures on imported goods claiming preferential treatment among ECO countries. To follow up on those activities, the Quetta Plan of Action (1993) made specific provisions on trade.

In several ECO countries, the enterprises and networks formerly engaged in trade were privatized or officially relieved from Government responsibilities over the past decade. In such a context, where there is no organized private sector with enough resources and foreign connections to take over, the process of trade re-organization will take time and will require assistance. The experience of FAO in this matter could be of great interest to the countries concerned.

FAO's various technical assistance programmes could assist in increasing productivity and enhancing the diversification and competitiveness of agricultural exports, and in promoting trade, including intra-regional agricultural trade, in line with the comparative advantage position of the various countries. FAO can also provide assistance to member countries in adjusting to the changing trading environment, complying with commitments under the Marrakesh Agreement and preparing for future trade negotiations.

A particular case in ECO is represented by Turkey which is a net exporter of agricultural products. The expansion in world trade induced by the Uruguay Round Agreement on Agriculture should generally be of benefit to Turkish trade in agricultural products. The prospects for such trade improved with the formation in January 1996 of a customs union with the European Community. Although agricultural products are exempted from the customs union, Turkey will benefit substantially from easy access granted to its cotton-based textile goods. The customs union agreement contains provision for a progressive improvement in the terms which Turkey and the community grant each other for trade in agricultural products. Ultimately, unrestricted trade in primary agricultural commodities is a possibility, but this would require the adjustment of Turkish agricultural policies.

Iran is another special case. With the successful implementation of its new policies and programmes, Iran seeks to increase the contribution of agriculture to its economic growth, to raise the production of foods so as to meet the energy and nutrition needs of its people, to reduce dependency on imports, to slow rural to urban migration, to reduce social and economic disparities and to provide better access to foods in the cities.

## **2. REQUIREMENTS FOR ACTION: SCENARIOS FOR WORLD FOOD SUMMIT FOLLOW-UP**

### **2.1 Major Challenges and Constraints**

For most of ECO's countries in economic transition, the on-going programmes of comprehensive reform must be completed to enable income growth in the rural sector and to

redress the current slide to severe poverty. Much of the work in agricultural reforms still lies ahead and needs to be accelerated. Reforms should give special attention to marketing, processing, inputs supply and services as well as farm organization.

The on-going land reforms also complicate the situation in the transition economies. At least for certain types of services such as the on-farm maintenance of irrigation systems, the primary marketing of commodities, the renting out of machinery, and the organization of independent private farmers into associations or unions, would make economic sense. In this respect the reluctance to decollectivise former "sovkhozes" and "kolhozes" in certain areas is delaying the setting-up of sound farming structures based on voluntary cooperation.

The weight of past experiences is another difficulty to overcome. Farmers used to be the employees of large-scale agricultural concerns and performed specific tasks. Even with enhanced educational programmes and improved extension services, it will take some time before farmers become familiar with the whole range of techniques and business tools required to manage individual private farms. There is the core capacity for agricultural knowledge and technology in the CIS countries. What is needed is the adaptation of the existing knowledge for promoting market agriculture and improving management practices. The absence of such adaptation is a major constraint for achieving food security. The in-service training of staff will resolve this constraint.

Lack of credit which hinders access to quality seeds, farm inputs and agricultural machinery is also recognized by all Governments and local farmers as a major constraint to the recovery of agriculture. Another area of concern is the ecological threats to food production resulting from past abuse of chemical fertilizers and crop protection chemical agents. Several countries suffer from heavy contamination of soil and groundwater with chemicals, and of salinization and water-logging of soil due to poor drainage methods in irrigated fields. This phenomenon is particularly striking in the CIS countries such as the ecological disaster of the Aral sea and the salinity problem of the irrigated land in Central Asian countries.

Finally, a major hindrance to the overall recovery of the agricultural sector is the present limited capacity of the system to absorb external assistance. External assistance is channeled through Governments with no or little auto-financing capacity (e.g. the rehabilitation of irrigation schemes) and limited borrowing ability. As for programmes targeting the activities of the emerging private sector, the modest cash-generating capacities of most potential beneficiaries – be they farmers, traders or agro-industrials – should also be kept in mind.

The challenges and constraints for other ECO countries are different. Iran pursues a strategy of self-sufficiency for basic crops based on better price incentives for commodities and inputs, improved producer services, and the development of medium and small-scale irrigation. Its key challenges are to reduce the pressure on the environment that has resulted from this strategy, to reduce gradually but substantially the burden of food subsidies, to expand livestock production through improved range management, to expand fisheries, to arrest desertification and to improve irrigation efficiency.

Concerning Pakistan, the major challenges are in establishing adequate rural infrastructure, overcoming institutional and financial constraints, improving the economic environment for agriculture (credit, input supply, administered price and the terms of trade),

improving its trade channels with the CIS countries of Central Asia and reducing salinity and waterlogging in irrigated areas.

The Challenges facing Turkey are: to bring into full use the vast irrigation schemes currently under development in eastern Turkey (which is economically a depressed area), to increase the efficiency and competitiveness of agriculture to take full advantage of the customs union with the European Union (EU), to further develop its agro-industrial potential, to gain self-sufficiency in livestock products, and to expand trade with other ECO countries, especially the CIS countries as well as the Arab world.

For Afghanistan the major challenge ahead is the rehabilitation of agriculture from the damages incurred by 20 years of war. This can be achieved only by decentralizing decision making, involving rural people in the development of infrastructure and strengthening key institutions, particularly the agricultural bank, the fertilizer company and the extension service for both crops and livestock development. To some extent, Tajikistan faces the same challenge as Afghanistan.

Another challenge facing several countries in the southern part of ECO region is the low participation of women in economic activity. In 1995, the rate of female participation as percentage of male participation was 32% in Iran and 36% in Pakistan (compared with 64% for the developing countries as a group).<sup>5</sup> Stress on female education and improving the legal framework could resolve these constraints within the not too distant future.

## **2.2 Strategic Orientations**

Common objectives to all ECO's countries are the increase of agricultural production and productivity while improving food security particularly through poverty reduction. For CIS countries of ECO the strategic orientations include import substitution, resources conservation and improving the standard of living of the rural population. Capacity building for the economic and policy actors in the whole agro-food sector is also critical. Each strategic orientation calls for appropriate policies and instruments.

Free market operations and international trade linkages should result in crops specialization for which ECO countries have a comparative advantage. In this respect a key strategy option is to accelerate the elimination of barriers to trade. For non-WTO members, the strategic option of seeking membership may be clarified through observer status, that allows an increase in their awareness of multilateral trading system and provides a better basis for making their own decisions regarding membership.

The provision of basic needs such as water supply, education and healthcare will, in the foreseeable future, remain the responsibility of the Governments. In the meantime, support for the development of private institutions is urgently needed in order to strengthen the socio-economic framework of the rural communities (for example: credit programmes, new forms of water supply management, and autonomous farmers organizations).

For Governments, the areas of special concentration would include reforming agricultural policies, the design and implementation of reforms concerning extension,

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<sup>5</sup> UNDP Development Report 1998, Table 11, pp. 154-155.

information and research systems, as well as the development of communications and transport to domestic and export markets. Their agricultural extension programmes should facilitate the adoption of high yielding technologies and assisting producers to shift to higher value products with market potential. Investment in production and marketing should be left to private investors.

Strategic orientations for other ECO countries are somewhat different. In Iran, the choice of self-sufficiency for all basic commodities which has been pursued over the last two decades could be gradually altered, with focus on products for which the country has a comparative advantage.

In Pakistan, the main strategic options facing the Government relate to trade and pricing policies; the extent of Government intervention in input and output markets; access to resources by the rural population, particularly the poor; and more effective use of public expenditure devoted to agricultural development. The acceleration of rural development in the economically depressed provinces of Baluchistan and the Northwest Frontier calls for particular attention.

In Turkey, the allocation of resources among agricultural activities needs to be determined principally by market forces to ensure that production is based on comparative advantage. This is particularly vital for the newly irrigated areas of eastern Turkey. The success of this policy will enable Turkey to expand its trade with EU and other ECO countries in particular.

In Afghanistan the strategic choice is to complete the rehabilitation of agriculture. The expansion of the agricultural base should await until the rehabilitation process is completed.

For irrigated crops, ECO's strategy should focus on the sustainable use of water; increased re-use of treated wastewater, surface water collection, economic pricing of water, application of water saving technologies and more suitable cropping pattern with emphasis on forage crops.

Concerning rainfed agriculture, the emphasis should be on the rehabilitation of mechanization, introduction of drought resistant varieties, efficient and judicious use of chemical fertilizers and pesticides, avoiding excessive monocropping and abandoning mal-practices such as deep ploughing and overgrazing. Livestock production ought to be promoted, *inter alia*, through rangeland improvement and conservation practices, production of fodder under irrigation, rotations of legumes in rainfed areas, while improving the availability of coarse grains either through increased domestic production or through imports. Animal health must receive priority in nearly all countries of ECO. The contribution of the emerging private sector should be particularly targeted in the areas of small-scale irrigation, the development of livestock farms, aquaculture, agro-processing, rural finance and input supply.

### **2.3 Major Priorities for collective actions**

The fact that several agreements have already been signed in support of the Special Programme for Food Security is encouraging in this context. However, a vigorous effort of resources mobilisation from ECO member states and the international community is required. As some countries (Uzbekistan, Kazakhstan, and Turkmenistan) may be interested to pursue regional economic cooperation through organizations and modalities other than the ECO, it is

suggested to prepare a conceptual strategy for Food Security for five Central Asian Countries only. Based on the above challenges, constraints, and strategic orientations of the ECO member countries, the major priorities for agricultural development and food security achievement in this region are:

1. Sustainable food security at the national and household levels.
2. Management of natural resources with special reference to water management, efficient utilization, and pollution.
3. Enhancing national technical and institutional capabilities in the area of policy design, analysis and long term strategic planning under the new market oriented system
4. Improve marketing and agro-processing facilities including market information and early warning systems.
5. Harmonization of agricultural and trade policies among the ECO Member Countries to enhance the sub-region's food security and agricultural intra-regional trade.
6. Enhancing crop and livestock production, productivity and intensification.
7. Development of rangelands and animal feed production
8. Improvement of the plant protection and animal health quarantines and facilities/institutions.
9. Improving fisheries and aquaculture sectors.
10. Biodiversity and Forestry development.
11. The accession to the WTO and its implications for internal policy reform.

The following Priorities are also crucial to some countries:

1. Diversification of farm production and technology transfer at the farm levels.
2. market oriented Improve rural finance system and institutions with special reference to micro-lending schemes.
3. Improving land distribution and property rights regulations and implementation.
4. Development of the livestock and poultry sectors.
5. Human resources development and capacity building for farmers, extension specialists, civil societies practitioners, and policy analysts.
6. Strengthening the role of women in sustainable rural and agricultural development.
7. Enhancing off-farm income generation schemes.

The framework for defining priorities for technical assistance was based on the national perspectives and development agenda pertaining to the countries' unique situation and the experience of the relevant UN and other agencies in these countries and was also guided by the available information from FAO National Strategies, the UNDP Country Co-operation Frameworks (CCF) and the FAO Special Programme for Food Security (SPFS) in Turkmenistan.

There are some policy issues, however, that may benefit ECO member countries from a collective approach, e.g., (i) trade liberalization and harmonization, (ii) improving agricultural export marketing and (iii) enhancing national government capabilities in the area of policy design and technical expertise. This short list of common issues that may be usefully addressed through a regional approach fits in well with the remit of ECO, which is:

- i. to promote conditions for sustainable economic development;
- ii. to remove trade barriers within ECO;
- iii. to provide for the gradual and smooth integration of the economies of Member States;
- iv. to promote cooperation in social, cultural and scientific fields;

- v. to promote economic liberalization and privatization, including joint ventures;
- vi. to intensify the utilization of ECO's natural resources;
- vii. to facilitate cooperation in environmental protection; and
- viii. to enhance efforts for the effective utilization of agricultural and industrial potential.

## **2.4 Resources Implications to 2010**

A first estimation of the financial resources needed to meet such broad agriculture development objectives by 2010 had been made in the context of the national strategies elaborated as a follow-up to the World Food Summit. In the absence of adequate investment data for all countries in their national strategies, and to enable aggregations, a more general but uniform approach has been adopted by FAO in the preparation of the investment estimates presented below.

For the time being, preliminary estimates are available for four ECO countries only, which account for more than 80% of ECO's population. These estimates give a rough indication of the financial resource requirements. For the four countries (Afghanistan, Iran, Pakistan and Turkey), the total investment needs amount to US\$168,093 million<sup>6</sup> for the period 1998-2010 (Table 3). Overall, irrigation and drainage would require at least US\$21,676 million, livestock development US\$23,254 million, and agro-industry and marketing about US\$44,066 million and US\$13,700 million respectively.

It should be noted that investment needs comprise gross private and public investment. Also, an important part of this investment consists of labour provided by the farmers themselves, namely through people's participation activities. Such investment in human resources may account for 40 % or more of certain investments. For the CIS countries of ECO, the current level of total investment in their economies is approximately US\$3-4 billion per annum or about 10% of their aggregate GDP but this needs to be raised substantially in the next decade.

Regarding land development, the importance of irrigation has to be underlined. With respect to livestock development, investment requirements concern in particular poultry, a low cost and rapidly productive form of investment, goats and sheep, cattle, as well as animal shelters. Investments regarding agro-industry and marketing are important (about 40% of the total investment needs). Finally, other important additional investments that are not included in this table will be needed, in particular for the development of fisheries, and also for training, extension, research, and basic infrastructure. Provisional figures deriving from the World Food Summit (WFS) follow-up national strategies indicate in that respect a minimum of some US\$560 million. Satisfying these investment needs in agriculture will require special efforts from the members of ECO with regard to public sector outlays and private investment. The macro-economic and legal context as well as the prevailing regulations should also be made conducive to enhance the efficiency of these investments, and thereby stimulate the movement towards comparative advantages

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<sup>6</sup> These figures only provide at this stage a broad order of magnitude. More precise and detailed estimates will be needed at the various operational levels with the participation of the countries concerned.

In addition, the ECO countries should pay special attention to the preparation of requests to bi- and multi-lateral donors and lending institutions for funding agricultural development programmes. The priority granted to these requests will enhance the ability to obtain financial resources up to the levels required by the investment programmes.

**Table 3**

**ECO**  
**Estimates of gross investment requirements in agriculture (1998 – 2010)**

Country	Irrigation	Non irrigated land development requirements	Establishment of permanent crops	Implements ( Tractors , hand tools, etc.)	Animal Production	Agro-industry	Marketing	Total
	Millions of US dollars							Millions of US dollars
Afghanistan	1,074	111	64	528	1,051	1,886	929	5,642
Azerbaijan	2,500	500	75	247.5	2,225	700	-	6,548
Iran	5,268	359	442	7,224	3,621	7,756	2,889	27,559
Pakistan	7,897	275	714	11,779	11,718	18,571	5,215	56,169
Tajikistan	-	210	-	-	-	-	-	210
Turkey	3,937	1,279	634	40,020	3,301	14,453	4,654	68,279
Turkmenistan	1,000	-	-	857.5	1,338	700	-	3,896
<b>TOTAL *</b>	<b>21,676</b>	<b>2,734</b>	<b>1,929</b>	<b>60,965</b>	<b>23,254</b>	<b>44,066</b>	<b>13,687</b>	<b>168,303</b>

\* Includes only the countries listed, which account for 87 % of the region's population in 2000.

The above data are gross investment needs provisional estimates for achieving the strategy's objective. They include public and private investments and the labour provided by the farmers themselves. They may differ from the national strategy papers because a uniform methodology was applied to facilitate countries aggregates.

\* No data available for other ECO member countries.

## 2.5 Actions to be taken at National, Regional and International Levels

At the national level, the objectives of ECO countries generally entail actions aimed at conserving the resource base, increasing farm productivity, creating non-farm employment, enhancing freedom of mobility with respect to capital and labour, as well as the freedom of exchange of national and foreign goods and products. Such actions will have direct effects on the agricultural sector, and should stimulate synergies contributing to the gradual reduction of malnutrition among the population. Further specifications will be required, aiming in particular to define and implement the national strategies that were developed as a follow-up to the WFS.

At the regional level, and beyond the promotion of trade liberalization measures among member countries, the ECO could enhance collaboration among its members for jointly promoting regional food security. In particular, the preparation of common policies and joint programmes could be envisaged for (i) food security to reduce poverty and to promote better access to food products, (ii) improvement of productivity with a view to reducing dependency on imported basic foodstuff, and (iii) initiating specially tailored programmes for sustainable mountain agriculture which is a common need among ECO countries.

At the international level, and as emphasized previously, the FAO Special Programme for Food Security (SPFS) could contribute meaningfully to the achievement of national food production, productivity and food security objectives. The application of SPFS will require access to various sources of financing. More efforts should be made to mobilize bilateral and multilateral financial flows for different stages of the Programme. It is to be noted that FAO has signed agreements with the World Bank, UNDP, regional Banks and the Islamic Development Bank regarding the SPFS as well as with several developing countries for technical assistance within the framework of the South-South Co-operation. But, it is advisable that national Governments establish a special budget line reserved to the local part of financing the SPFS.

Through its various technical assistance programmes FAO can also contribute to increasing productivity, diversification and competitiveness of agricultural export products in member countries of the ECO, and in promoting trade, including intra-regional agricultural trade commensurate with the comparative advantages of member countries. The harmonization of phyto- or zoo-sanitary trade measures among countries is part of the conditions required to facilitate and stimulate intra-regional trade in agricultural products. International norms and standards within the Codex Alimentarius are a fundamental technical and regulatory basis for the establishment of national regulations.

FAO could use its capacity for assisting member countries in areas such as training of managers in legislation and technical matters, and regional co-operation among laboratories and other scientific instruments of control. It has made available, in particular, a reference Internet site for the Codex<sup>7</sup>, as well as another site on the Uruguay Round Agreements<sup>8</sup>, in which reference information and texts are available jointly with a description of FAO's assistance programmes in these fields. Other programmes aiming at these objectives are training for assessing the changing conditions of the international trading environment, in the

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<sup>7</sup> <http://www.fao.org/>

<sup>8</sup> <http://www.fao.org/ur/>

context of the disciplines and opportunities emerging from the Marrakech agreement, and preparation for the incoming trade negotiations concerning agriculture.

Many of the above mentioned activities could be undertaken within the framework of a “Regional Programme for Food Security in the member countries of the ECO” for which a draft project document is attached.

## Annex 1.

### ECO International transactions

Country	Exports of goods and services (1) *	Imports of goods and services (2) *	Current account balance (3) *	Total debt service (4) *	Ratio (4) / (1)
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	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Azerbaijan	12,83	2,146	1,917	2,033	- 601	- 150	85	110	7%	5%
Iran, Islamic Rep.	21,077	30,991	16,419	18,370	4,728	13,319	9,177	6,914	44%	22%
Kazakhstan	6,919.	10,751	6,740.	8,705	- 236	1,074	1,370	1,822	20%	17%
Kyrgyz Republic	528	573	701	651	- 180	- 77	108	169	21%	29%
Pakistan	8,842	9,575	11,737	11,762	- 2,698	-2,108	2935	2,786	33%	29%
Tajikistan	677.	800	693	839	- 36	- 61	40	53	6%	7%
Turkey	44,547	50,116	48,712	62,190	- 1,360	- 9,819	18,644	20,886	42%	42%
Turkmenistan	1376.	2,774.	2,046	2,350	- 571.	412	479	374	35%	14%
Uzbekistan	3,099	3,383	3,144	2,962	- 164	184	574	957	19%	28%

( ) Total on partial data.

\* Source: World Development Indicators Database, April 2002. The World Bank

\*\* Average ratio for the countries that have both (1) and (4) data available)

n.a: no data available

All data in Millions of Dollars US

#### DEFINITIONS:

Current account balance

It is the sum of net trade (exports minus imports) in goods, services, and income plus net current transfers

Total debt service

It is the sum of principal repayments and interest paid in foreign currency, goods, or services on long-term debt and interest payments only on short-term debt.

Imports of goods and services

Imports of goods and services represent the value of all goods and other market services provided to the world. Included is the value of merchandise, freight, insurance, travel, and other nonfactor services. Factor and property income (formerly called factor services), such as investment income, interest, and labour income, is excluded.

Exports of goods and services

Exports of goods and services represent the value of all goods and other market services provided to the world. Included is the value of merchandise, freight, insurance, travel, and other nonfactor services. Factor and property income (formerly called factor services), such as investment income, interest, and labour income, is excluded.

## Annex 2

### ECO Share of food import compared to export of goods and services

Country	Food imports (1) **	Exports of goods and services (2) *	Ratio (1) / (2)
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	1999	2000	1999	2000	1999	2000
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Azerbaijan	195	205	1,283	2,146	15%	10%
Iran, Islamic Rep of	1,959	2,427	21,077	30,991	9%1	8%
Kazakhstan	466	466	9,916	10,751	7%.	4%
Kyrgyzstan	53	61	528	573	10%	11%
Pakistan	1,496	896	8,842	9,275	17%	9%
Tajikistan	69	68	677	800	10%	9%
Turkey	1,261	1,263	44,547	50,116	3%	3%
Turkmenistan	198	192	1,367	2,774	14%	7%
Uzbekistan	408	361	3,099	3,383	13%	11%

( ) Total on partial data.

\* Source: World Development Indicators Database, April 2002, The World Bank

n.a: no data available

All data in Millions of Dollars US

**Annex 3**

**ECO  
Selected Indicators**

INDICATORS	UNIT	1997	1998	1999	2000
<b>Population &amp; Agricultural Labour Force</b>					
Population	1000	338,043	344,546	351,218	357,872
Population annual growth	percent	1.77	1.82	1.72	1.54
Rural / Total Population	percent	52	52	51	51
Density	Inh/ sq km	52	52	51	51
Agricultural Labour Force	1000	59,513	58,233	58,057	58,715
Agricultural Labour Force/Total Labour Force	percent	44	43	42	42
<b>Land Use</b>					
Total Land	1000 HA	793,720	793,720	793,720	793,720
Arable Land + Permanent Crops	1000 HA	118,512	116,937	116,829	
Permanent Pasture	1000 HA	248,561	248,588	248,617	
Forest and Woodland	1000 HA				
Irrigated Land	1000 HA	43,221	43,987	44,075	
<b>Agricultural Production - Major Items</b>					
Wheat	1000 MT	63,452	66,442	64,220	61,796
Cow milk, whole, fresh	1000 MT	45,970	47,885	47,329	46,154
Cotton lint	1000 MT	4312	4114	4930	4528
<b>Food Production</b>					
Food Production Index	1989-91=100	103	109.5	97.7	96.6
Per caput Food Production Index	1989-91=100	86	87	89	90
<b>Foreign Trade - Exports</b>					
Total	MLN US\$	86,848	81,417	72,962	
Agricultural	MLN US\$	11,599	10,292	9,588	
<b>Major Exports (share in Agriculture)</b>					
Cotton lint	percent	28.5	27.2	29.5	
Tobacco leaves	percent	5.7	6.2	6.5	
Milled paddy rice	percent	5.1	5.7	6.2	
<b>Foreign Trade - Imports</b>					
Total	MLN US\$	65,451	60,135	62,772	
Agricultural	MLN US\$	10,573	9,599	8,728	
<b>Major Imports (share in Agriculture)</b>					
Wheat	percent	15.2	16.3	16.5	
Palm oil	percent	8.5	8.9	9.3	
Sugar refined	percent	16.5	16.8	17.1	
<b>Land &amp; Inputs</b>					
Total Population/Arable Land	Inh / HA	3.01	3.12	3.20	
Fertilizer Use/Arable Land	kg nutrs./HA	31	26	26	
Tractors/Arable Land	no/ 1000 HA	0.7	0.7	0.7	
<b>Food Supply</b>					
Per caput Dietary Energy Supply	kcal /day		2,572		
Per caput Dietary Protein Supply	g / day		81		

Source : FAOSTAT

INDICATORS <sup>1</sup>	UNIT		INDICATORS <sup>1</sup>	UNIT	1999/00
Gross Domestic Product (GDP)	MLN US \$	408,300	Annual growth rate: GDP Agricultural GDP		
Agricultural GDP as share of total GDP	percent	23.4		percent	4.9
Gross National Product per caput	US \$	1,140		percent	5.2

Note : Agricultural GDP includes Forestry & Fisheries

Source : WORLD BANK