

# COOPERATION IN CENTRAL ASIAN AGRICULTURE: CURRENT STATE AND OUTLOOKS

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## 1. REVIEW OF THE CURRENT STATE OF THE AGRICULTURAL SECTOR OF THE CENTRAL ASIAN ECONOMIES (KAZAKHSTAN, KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN):

- ▶ Socio-economic factors determining the current state of the Central Asian agricultural economies;
- ▶ Physical Features and Climate;
- ▶ Organizational and Legal Framework;
- ▶ Forms of farming in Central Asia – agriculture, cattle raising, processing.

Potential and cooperation outlooks for Central Asian countries in agriculture:

- ✓ Impact of trade and economic policies of Central Asian countries on the development of agriculture (import-export, customs procedures, tax policies, finance and credit system);
- ✓ Current state of marketing, information systems, relationships with the rest of the economy, new technologies.
- ✓ Agricultural development in the adjacent countries (Iran and Afghanistan): current state and prospects.

## 2. REVIEW OF THE CURRENT STATE OF THE AGRICULTURAL SECTOR OF THE CENTRAL ASIAN ECONOMIES

### SOCIO-ECONOMIC FACTORS DETERMINING THE CURRENT STATE OF THE CENTRAL ASIAN AGRICULTURAL ECONOMIES

Central Asia includes five countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. This region occupies an enormous area, of which 70 percent is cultivable; 15 percent is arable land of which 24 percent is under irrigation. Grazing land accounts for approximately 200 million hectares.

The Soviet-era economic model still largely determines the present pattern of the agricultural sector in the region.

This is the so-called ‘overtaking’ path of development, which has been followed by many nations of Asia, Africa and Latin America over the last few decades. Essentially, this obsolete economic model making industry heavily dependent on raw-materials is equally unfit for capitalist or socialist systems. The ‘overcoming’ strategy builds on an attempt to replicate the experience of advanced economies. Actually, the experience of the developing countries following these lines is deplorable. Most of the economies relying exclusively on raw-material production have failed to achieve desirable successes while the possibility of political and socio-economic disruption in those countries has become even stronger.

This was caused by the fact that due to their own socio-cultural, resource-pattern, demographic, natural climatic features as well as to world labor and capital division the developing countries have run into a host of acute problems that were unknown to the post-industrialized world. These problems may be identified as single-crop agricultural practices, industrial dependence on raw materials, pollution of local ecosystems for industrial reasons, ever-growing shortage of water, land, energy and food resources amid rapid demographic growth.

Recall the images the Central Asian nations used to have in the past. Uzbekistan was typically associated with cotton, Turkmenistan with cotton and Karakul pelts, Tajikistan with cotton, Kyrgyzstan with wool, meat, tobacco and cotton while Kazakhstan was largely identified with grain, wool and meat. Plus fresh fruit and vegetables. That’s what these countries were specializing in. Such malpractices ended up in soil exhaustion, irrigation water shortages, etc.

Organizationally, the agricultural sector can be identified as farming of industrialized types. Besides, the countries were maintaining cooperation in goods supplies.

That’s what it used to be in the past.

Since 1991, the Central Asian countries have been independent and sovereign states. They had to elaborate agricultural policies of their own.

Currently, the agricultural sector has a number of functions to perform, including:

- ▶ laying foundation for provision of foods;
- ▶ supplying raw materials to the industrial sector;
- ▶ contributing to the export potential;
- ▶ alleviating poverty in the regions;
- ▶ responsibility for a portion of financial resources used to boost other sectors and industries.

In more general terms, Central Asian agriculture can be characterized as follows:

- ▶ it is a source of employment for one-third of manpower;
- ▶ the share of agriculture in GDP has, on the average, grown since independence; this, though, was due to the downturn in the rest of the economy;
- ▶ wheat, cotton and cattle farming remain staple branches of the agricultural sector;
- ▶ land currently used for pastures covers approximately 200 million hectares where extensive cattle farming is in common practice;
- ▶ agriculture is diversified, has a great potential and can be essential in achieving national economic targets.

A transition from the centrally-planned economy to a market economy, which the Central Asian countries experience at present, is a process that includes the following several phases:

- ✓ Phase 1 – transformation of the old economic system and development of a new economic mechanism.
- ✓ Phase 2 – consolidation of market economy mechanisms.
- ✓ Phase 3 – beginning of steady economic growth and development.
- ✓ Phase 1 deals with the destruction of the old economic mechanism and focuses on the elaboration of liberal policies, which are to be followed by a stabilization macroeconomic policy, and, finally, advent of new economic entities.

Phase 2 is concerned with the gradual evolution of newly emerged economic entities and market economy mechanisms.

Phase 3 essentially covers a period during which economic growth rates gradually gather momentum.

The list of priorities also includes measures designed to enhance food security and materialize export potentials.

The above factors have led the countries to producing goods hitherto manufactured by their neighbors. Turkmenistan and Uzbekistan gave an impetus to grain production while Kyrgyzstan chose to boost cotton manufacture and, incidentally, in so doing surpassed the level established by the last Soviet-era five-year economic plan. Yet, the water problem ended up as the weak point in this effort, irrigated cropping being the backbone of the region's farming – a factor that triggered antagonisms in the relations among the Central Asian countries.

A tendency for changing production types represents another aspect of the agricultural sector's development in this region. Kyrgyzstan, for one, refocused its economy from industrial production to small-scale commodity production. Now it has over 80,000 agricultural entities employing extensive methods against three hundred or so that it had in 1991.

And the final consideration. Since all of Central Asian countries need foreign currency they choose to intensify their export potentials. As regards their traditional goods, they share the same markets and hence bitter competition for markets, especially because market capacity has substantially declined.

The development scheme focusing on raw-material-based industry, which goes back to the Soviet days, has turned into a serious constraint. Regrettably enough, this decades-old model is extremely sluggish and conservative.

At any rate, the most dramatic transformations occurred precisely in the agricultural sector, which showed an increase in gross output. Its 1999 progress accounted for the growth of Kyrgyzstan's GDP (8.7%) at large. In 2000, Turkmenistan displayed 17-percent output growth rates in terms of value while the private sector accounted for 74 percent of gross agricultural output versus 70 percent in 1999. It may be asserted that the agricultural sector is where market relations are best developed compared with the other sectors throughout the region.

## **PHYSICAL FEATURES AND CLIMATE**

Wide average annual temperature ranges reflect the extreme continentality of the Central Asian climate. It is characterized by sparse and unstable precipitation and significant evaporation. Summer season is typically hot and dry. Winter is mild with little snow, although there are years with heavy but short-time snowfalls. Hot and dry winds and dust storms are typical for valleys. Landscape is of a mixed type represented by mountains, deserts and steppes.

The following four major agroenvironmental zones can be identified in the Central Asian region:

- ▶ irrigated lowlands;
- ▶ lowland semi-arid natural pastures;
- ▶ dry lowlands;
- ▶ highlands (including upland pastures and valley croplands).

#### **ORGANIZATIONAL AND LEGAL FRAMEWORK**

The structure of the agricultural complex is taking shape on the basis of a market economy mechanism as a result of a reform effort influenced by certain socio-economic conditions. Urgent steps should be taken to direct reform in agriculture towards transferring ownership of land and property to farmers so as to create a solid community of individual manufacturers in the rural areas. The top priority of land and agricultural reform can be attributed to objective circumstances. The key target of the agricultural reform is creating a group of individual manufacturers personally interested in their work and eventual results.

The state remains the owner of large land resources even in countries that officially recognize private ownership of land – a circumstance that explains why issues related to land privatization in these countries are a long way from being finally settled. In a situation, where any land deal – be it a sale or tenancy – is subject to limitations, the farmers cannot control their production activities to improve efficiency. Worse, there are no procedures for transferring land to more efficient users. Limits imposed on the transfer of land are a serious barrier to achieving higher efficiency, whatever formal land ownership.

Private ownership of land and the right to use it are not synonymous: some economies in transition restrict landowners' right to conducting any land transactions while others guarantee that state-owned land may be transferred for individual use. Although, generally, the Central Asian countries do not recognize private ownership of land with the exception of Kyrgyzstan (and Kazakhstan, where the issue is still under discussion) they have taken different approaches to land dealings: Kazakhstan, Kyrgyzstan and, since recently, Tajikistan guarantee tenancy while Turkmenistan and Uzbekistan forbid any land dealings.

An opportunity to transfer the right to use land is a major prerequisite to efficient farming under market conditions.

#### **FORMS OF FARMING IN CENTRAL ASIA – AGRICULTURE, CATTLE RAISING, PROCESSING**

The following forms of ownership are widespread in the countries of Central Asia: individual, family, integrated, cooperative, stock, state ownerships and limited liability companies. Of importance are also personal holdings, proportions and emphasis varying from country to country.

The private sector in rural areas can be divided into the following three forms of economic entities: family peasant farms, integrated farms and cooperatives. Family farms include landholdings that family members were given during the land redistribution in state and collective farms. Integrated peasant farms represent associations of family farms created for cultivating land by joint effort. It should be admitted, though, that integrated farms and cooperatives show little difference in structure: in either case it is insufficient mechanization, which makes private entities bring their individual holdings together. Typically, cooperatives are much bigger in size.

The output rates in the private sector are closer to what they used to be in the pre-transition time than the rest of the economy. It is precisely the private sector that in the few recent years has shown the highest growth rates for the simple reason that interest in the final result of work is a good incentive.

Take, for one, farms specializing in the processing of cereals and oil-yielding crops. Earnings from processing normally do not exceed 10% to 15% of the farmers' total incomes. Individual farms (households), members of integrated farms or agricultural cooperatives, normally engage in individual business like purchase and sale (resale) of agricultural produce to earn extra money.

Also, it has been established that farms are normally reluctant to go into service business or engage in processing their own produce if their landholdings are under 50 hectares in area because farms with holdings of up to 2 hectares can barely cover their own consumption, that is they work on a self-help basis. Farms with holdings of 2 hectares to 50 hectares use part of their produce for consumption and part for sale. And finally, farms with holdings of over 50 hectares use their produce almost entirely for sale. These large farms are major agricultural manufacturers.

Farms belonging to the same class of economic entities but differing in the farmland size show a sharp difference in the proportion of manufacturing and sales. Small-scale family farms cultivating vegetables as well as farms with 10-hectare holdings are predominantly market-oriented. We have revealed cases where peasant farms comprising, in some regions, up to 500 families with a combined land area of over 50 hectares produce goods for consumption with but a small part reserved for sale.

### **3. POTENTIAL AND COOPERATION OUTLOOKS FOR CENTRAL ASIAN COUNTRIES IN AGRICULTURE**

Central Asian leaders realized the need for economic rapprochement in the late 1980s when the regional self-supporting policy was pursued throughout the Soviet Union. Back then they understood that it was hard for the Central Asian region, almost wholly dependent on the production of raw materials, to compete with the more industrialized European part of the country, and it was necessary to cooperate in order to keep afloat.

Back in 1990, just ahead of the break-up of the Soviet Union, the leaders of Central Asian countries and Kazakhstan at their meeting in Almaty (Kazakhstan) gave the green light to a mechanism designed to integrate national economies within the framework of the renovated Soviet Union, pursue concerted socio-economic reform policies and safeguard the region's interests at a time when market relations were still in their infancy.

It was decided that integration should not cover individual sectors, complexes and operations (unlike previous attempts at creating sectoral commissions to deal with cereal grain and cotton production, power generation, water resources management that had no positive effects whatever). Presumably, this process was to be more universal to make it easier to tackle regional economic problems in the uniform manner.

On April 30, 1994, a Treaty on Creating a Common Economic Environment was signed by Uzbekistan, Kazakhstan and Kyrgyzstan in Cholpon-Ata (Kyrgyzstan).

On the whole, leaders of three Central Asian nations originally directed their efforts at creating a legal framework of the integration process and its consolidation.

On June 26, 1998, Bishkek (Kyrgyzstan) hosted a meeting of the heads of government of Central Asia. Participation of Tajikistan was the meeting's principal singularity – a circumstance that sealed the membership now extended to four nations. For this reason the meeting's agenda was almost exclusively confined to issues tied to the admission of a new member. More than forty drafts and amendments were recommended for the Economic Development Program alone due to the increased number of members. Since that date this regional alliance has been known as the Central Asian Economic Community (CAEC).

It can be said with confidence that the four nations of the Central Asian region succeeded in establishing a viable community, which was able to implement concrete economic projects meeting their interests – it is another matter how successful and practical

their initiatives proved to be. While following the model of many other integrations throughout the world the Central Asian integration has yet to achieve the stage where multilateral accords would be viewed as more efficient than bilateral commitments.

Opponents of the multilateral integration point to the need for the member nations to establish supranational structures to supervise the implementation of decisions they make, which is incompatible with the principles of sovereignty and independence of the republics. This is a factor slowing down the integration process because creating a favorable climate for all member nations would mean that they had to sacrifice part of their independence as was done by European Union member nations. The Central Asian countries are not ready to do so, except Kazakhstan.

All we can say with assurance is that formation of joint inter-state bodies does not necessarily imply the restoration of old command structures like the State Planning Committee or State Committee for Material and Technical Supplies.

Most likely, it is influence in the region which is at stake here, a manifestation of a disguised (or undisguised, at times) struggle that some of the regional countries are waging for a new world economic order. If any of the states try and push through their leadership ambitions disguised as integration, most members may abandon any form of integration and end up with absolute autarchy or partial self-isolation.

Moreover, the regional powers decided to set up an inter-republican Consultative Council to formulate a common approach to economic issues of general concern.

This initiative was spawned by serious antagonisms among the countries, as suggested by Kazakhstan-based Central Asian Agency for Political Studies. The study's authors revealed the focal points of inter-state differences. They include border issues, water resources management, foreign-policy orientation, race for leadership in the region and access to transport routes.

#### **CURRENT STATE OF MARKETING, INFORMATION SYSTEMS, RELATIONSHIPS WITH THE REST OF THE ECONOMY, NEW TECHNOLOGIES**

Further growth and fortification of service facilities is deemed crucial for achieving the projected agricultural output targets. A number of such facilities need government's support today.

Let's review the development of service facilities as exemplified by the Kyrgyz Republic.

A World Bank project called "Support for Agricultural Service Facilities" designed for the period between 2000 and 2003 is expected to help equip the state testing network with up-to-date small-size machinery, lab equipment and computers, and significantly raise testing standards bringing them in line with world criteria.

During the implementation of another World Bank project, "Support for Agricultural Service Facilities" designed for the period between 2000 and 2005, state quarantine laboratories will be wholly fitted with adequate equipment meeting world standards. A great variety of newly emerged farms and peasant holdings feel pressures for effective consulting centers.

Integration of previously isolated consulting centers (TACIS, Helvitas, Caritas, GTZ, etc.) has been generally completed by now, and a single consulting center, Agricultural Consultation and Development Service Fund backed by the World Bank, has been created as part of the Support for Agricultural Service Facilities project. The Fund has offices in every province of this country employing 3 to 5 well-trained advisers in every region.

To keep peasants and farmers informed about raw material and food prices the project installed the Kyrgyz Market Information System, which provides information to manufacturers in this country and across the CIS.

As regards the near future, all we can say for sure now is that integration is quite realizable and in all likelihood it will start in the field of water and related energy resources management. It is impossible to discuss other steps until the initial results have been reviewed. Regrettably, mistrust in the regions has considerably grown.

In my view, next steps should target cooperation in seed farming and livestock breeding. Further, advances should be made in efforts to create a common information and marketing framework, forecast foreign market behavior and, finally, improve cooperation in processing capacity-building and partial specialization of production.

#### 4. AGRICULTURAL DEVELOPMENT IN THE ADJACENT COUNTRIES (IRAN AND AFGHANISTAN): CURRENT STATE AND PROSPECTS

##### AFGHANISTAN

Two decades of unceasing warfare have brought Afghanistan's economy to utter turmoil. Approximately one third of its total population have left the country with about 1.2 million Afghani refugees still staying in Pakistan and 1.4 million in Iran. A lot of operations have been destroyed; communication and trade links inside the country as well as those between Afghanistan and the outside world have been severely disrupted.

Agriculture has traditionally been the mainstay of Afghanistan's economy. In the 1980s, about half of its arable lands were under artificial irrigation based on a network of ditches fed by rivers and subsurface waters. Besides, there were drainage facilities combined with wells. Hostilities during the 1980s-1990s did great damage to irrigation facilities while working fields became a risky job due to a lot of landmines scattered around the rural areas. Small-scale farming units account for much of Afghanistan's farmland. Mineral fertilizers were used on a very limited level. Whatever, two decades of war have disrupted these traditional ways.

*Agricultural Specialization.* Cultivated crops are selected depending on the relief, climate, soil and elevation conditions. Cereal crops are grown at elevations under 2,700 meters above sea level. With elevation rice gives way to corn, then to wheat and at still higher elevations to barley. The most productive lands lie in the flat plains north of the Hindu Kush where Amu Darya tributaries form vast and fertile valleys, in the Kabulestan Plateau, in the valleys of the Rivers Kabul, Lowgar, Sarobi and Laghman, in the central Khazarajat Plateau as well as in the valleys of Harirud (near Herat) and Helmand provinces.

*Staple Farming Products.* Arable lands in Afghanistan are used primarily to produce cereals like wheat, corn, rice and barley. Other crops include sugar beet, cotton, oil seeds and sugar cane. Gardening centers on a variety of fruit like apricots, peaches, peas, plums, cherries, pomegranates and citrus plants. The country also produces grapes of various kinds, melons, almonds and walnuts. Major agricultural exports traditionally include fresh and dried fruits, raisins and nuts.

##### IRAN

Unfavorable natural factors, specifically arid climate and rugged relief, make it possible to cultivate but approximately 10 percent of the country's agricultural land. Some 40 percent of croplands are under irrigation and yield the bulk of agricultural products. Water for irrigation use is fed by different sources including deep wells, water reservoirs built on the Rivers Karkheh, Sefid Rud, Ab-e Dez and Karun, brooks and traditional network of underground facilities collecting subsurface waters from foothills.

The major part of the farmland is used to cultivate cereals like wheat, barley and rice. Wheat and barley are cultivated principally in dry (non-irrigated) farmlands lying in western and northern provinces while rice is produced in irrigated areas of the Caspian Sea coast. Staple commercial crops include cotton, sugar beet, oil seeds and tobacco. Sugar cane is cultivated in Khuzestan where two state-run farms were created. Since mid-1960s, the growing needs of the urban population have placed emphasis on the production of fruit, nuts,

vegetables (potatoes, onions and the like), melons, etc. Iran is home to diverse spices (saffron, caraway-seeds), edible roots (liquorice), medicinal plants and gums (tragacanth, ferule and fennel) predominantly sent for export.

Raising cattle is common both among farmers and nomads, for whom it is the basic source of food. Nomads are responsible for the major part of sheep migrating seasonally from mountain pastures to lowlands and back. Side by side with big cities are modern poultry factories and milk farms.

The agrarian reform implemented by the shah government resulted in the division of former estates. Nevertheless, differences in the size of land property still persist due to the fact that reform did not touch large-scale mechanized farms as the authorities were encouraging solid manufacturers in reclaimed areas.

(3,637 words)