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STATEMENT BY MR. SAGIT IBATULLIN, CHAIRMAN OF THE EXECUTIVE COMMITTEE OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA, AT THE MEETING OF THE OSCE PERMANENT COUNCIL

Vienna, 29 July 2010

Countries of the Aral Sea basin: water resources as a factor in regional security

Mr. Chairperson, Excellencies, Ladies and gentlemen,

In his video address to the OSCE Permanent Council on 14 January of this year, President Nursultan Nazarbayev outlined the strategic priorities for the Kazakh Chairmanship of the OSCE. He stressed that Kazakhstan would endeavour to achieve an optimum balance between the three "baskets" of security within the OSCE. He also noted that sustainable development in Central Asia was the top priority for Kazakhstan. These commitments are based on a careful analysis of current and future challenges. There is no other region within the OSCE area where the problems of environmental security are so acutely felt as in Central Asia.

As you know, the drying up of the Aral Sea has done much social and environmental harm to the countries situated in the Aral basin and had a negative effect on the health and means of existence of millions of people. The Aral Sea tragedy can serve as a lesson for the entire world.

The tragic history of the Aral Sea

The Aral Sea is situated in the northern desert region of Central Asia within the borders of Uzbekistan and Kazakhstan. Two major rivers – the Amu-Darya and the Syr-Darya – feed into the Aral Sea basin. These rivers are major transboundary watercourses and flow through the territory of six countries – Kyrgyzstan, Tajikistan, Uzbekistan, Kazakhstan, Turkmenistan and Afghanistan.

The total average annual run-off of all the rivers of the Aral Sea basin amounts to 115.6 cubic kilometres (78.4 for the Amu-Darya and 37.14 for the Syr-Darya, see table 1).

7.893

48.5

Country		Volume of run-off in cubic kilometres/year		Irrigated land	Population
	Syr-Darya	Amu-Darya	Total	Thousand hectares	Million persons
Kazakhstan	4.5		4.5	786	3.1*
Kyrgyzstan	27.4	1.9	29.3	415	5.3
Tajikistan	1.1	62.9	64.0	719	7.0
Turkmenistan		2.27	2.78	1,714	6.7
Uzbekistan	4.14	4.7	8.84	4,259	26.4

Table 1. Water and land resources of the region

37.14

Afghanistan

Total

The main streamflow of the Amu-Darya (2,540 kilometres in length and 309,000 square kilometres in area) is formed in Tajikistan (80 per cent), with 12 per cent in Afghanistan, 6 per cent in Uzbekistan and 3.5 per cent in Turkmenistan.

6.18

78.46

6.18

115.6

The main streamflow of the Syr-Darya (3,019 kilometres in length and 219,000 square kilometres in area) is formed in Kyrgyzstan (74.2 per cent), with 11.1 per cent in Uzbekistan, 12.1 per cent in Kazakhstan and 1.1 per cent in Tajikistan.

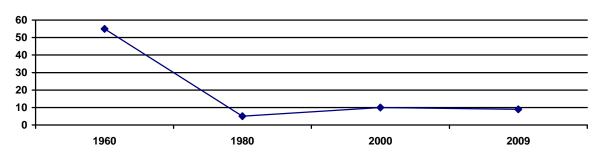
Accordingly, there is considerable inequality in the run-off distribution among the countries and the land irrigated in the different countries of the region.

There was a dramatic increase in the land irrigated in the region between 1965 and 1990 when the centralized government of the country (the USSR) decided to increase cotton and other crop production without taking environmental considerations into account. This sealed the fate of the Aral Sea because the total run-off into the Aral fell from 55 cubic kilometres in 1961 to between 8 and 10 cubic kilometres in 1990 (see table 2).

Table 2. The main indices for water and land resource use in the Aral Sea basin

Indices	Unit of measurement	1960	2007–2009
Population	Million persons	14.1	48.5
Area of irrigated land	Thousand hectares	4,510	7,893
Irrigated area per capita	Hectare/person	0.32	0.16
Total water intake	Cubic kilometres/year	60.61	105.0
Total run-off into the Aral Sea	Million kilometres	54.99	10.6

Proportion of population in the Aral Sea basin.



Total run-off into the Aral Sea in million cubic kilometres

These figures (table 2) clearly show the main cause of the desiccation of the Aral Sea and the associated environmental tragedy for an enormous region. From 1961 onwards there was a significant increase in the volume of water taken for irrigation purposes – up to 105 cubic kilometres.

This resulted in a disastrous reduction in the volume of water in the Aral Sea.

Until 1961, the Aral's average surface area was 67,800 square kilometres and the volume of water totalled 1,064 cubic kilometres.

The Aral Sea's waters currently amount to 13,000 square kilometres or 17 per cent of its previous size, and the volume of water totals 90 cubic kilometres or 9 per cent of the 1961 volume. In the northern Aral Sea (Kazakhstan) the water volume stands at 27.4 cubic kilometres, with a salinity level of between 6 and 17 grams per litre. There are around 60 cubic kilometres of water left in the southern Aral Sea, with a salinity level of between 90 and 120 grams per litre.

In addition to the shrinking of the Aral Sea, other new problems of a socio-environmental nature have emerged in the region.

Political changes have played havoc with the previous fairly stable system of water and energy exchange between the countries of the region and their national food and energy security has been threatened.

The main problem as regards the use of water resources in the Aral Sea basin lies in the conflict between the irrigation regime for the use of water by the downstream countries (Uzbekistan, Kazakhstan and Turkmenistan) and the use of the rivers for energy production by the upstream countries (Tajikistan and Kyrgyzstan).

Until 1991 the system for the distribution of water among the republics and the exchange of electricity produced by the upstream countries, namely Tajikistan and Kyrgyzstan, functioned fairly effectively within the framework of the single State (the USSR) and the planned economy. The reservoirs and hydroelectric installations constructed during the Soviet period were for the most part employed for irrigation purposes, accumulating water in autumn and winter and using it during the summer period for irrigation in the downstream countries, i.e., Kazakhstan, Uzbekistan and Turkmenistan.

The resulting electricity deficit, on the other hand, was covered by deliveries of coal, gas and oil from the hydrocarbon-rich countries along the lower reaches of the rivers (Turkmenistan, Uzbekistan and Kazakhstan).

Following the collapse of the USSR and the centralized management of water and energy resources, this finely balanced system was disrupted.

While until 1991 70 per cent of the river run-off was collected in the reservoirs of the upstream countries and transferred to the lower reaches during the growing season, in subsequent years the situation changed radically. The upstream countries with enormous hydroelectric potential at their disposal were forced to use up to 70 per cent of the river run-off during the winter period to produce additional electricity to make up for the shortage of coal.

This leads to disastrous flooding in winter and the destruction of housing and communication facilities, while during the summer drought in the lower reaches the food security of the downstream basin countries comes under threat. The differences in seasonal water needs have resulted in a major conflict between the two groups of countries using the transboundary rivers.

This problem is of fundamental importance to the countries of Central Asia. In the long term we may see greater competition for water among the countries of the region and a deterioration in inter-State relations with respect to water.

Creation of the International Fund for Saving the Aral Sea

An understanding of the realities in the post-Soviet space led to the decision by the presidents of the five Central Asian countries to create an inter-State body to manage water resources, namely the Inter-State Commission for Water Co-ordination (ICWC) in 1992, and then the International Fund for Saving the Aral Sea (IFAS), which was founded by the five countries of the region in 1993. The Fund's main task is to finance joint practical measures, programmes and projects for the environmental rehabilitation of the Aral Sea basin and improvement of the socio-economic situation of the region's population.

Over the years IFAS and its organizations have become a platform for negotiations and the drafting of bilateral and multilateral documents.

A number of treaties and agreements have been adopted on co-operation in water allocation and the joint management, use and protection of the region's water resources, and two Aral Sea Basin Programmes (ASBP) have been implemented.

In December 2008 IFAS was granted observer status in the United Nations.

At the same time, problems have also been identified in the process of implementing a water partnership, as have the reasons behind these problems. They became particularly acute in 2007 when the region faced a period with little rain, part of a natural cycle but also compounded by man-made factors. Some of the main challenges confronting the countries of Central Asia are those affecting water resources management and are of both a systemic and a localized nature.

One of the challenges for Central Asia is climate change.

1. Climate change poses a serious threat to Central Asia's entire natural environment and economy, among other things to the state of water and land resources in the region.

The global warming forecasts in this regard are disappointing. Between 1957 and 2000 glacier water reserves fell by more than 25 per cent, and this process is continuing unabatedly. According to specialists, by 2025 thousands of small glaciers will have disappeared, the area covered by glaciers will decrease by 20 per cent and ice reserves will fall by 25 per cent.

The temperature during the winter period has increased in much of Central Asia. In many parts of Central Asia the variability and intensity of precipitation is increasing; heavy rain showers are followed by periods of drought, exacerbating soil erosion.

The risk of flooding along transboundary rivers has increased considerably.

Glaciers are currently in retreat everywhere; the smaller ones are disappearing, while the larger ones are disintegrating. Rising air temperatures along with a reduction or insignificant increase in the volume of precipitation is leading to a drier climate. As a result of this, mountainous regions may lose a significant portion of their glaciers, and this in turn will have a considerable effect on surface run-off. Thus, by 2050 the volume of river run-off for the Amu-Darya river will have dropped by 10 to 15 per cent and that of the Syr-Darya river by 6 to 10 per cent.

2. Yet a further challenge to present-day sustainable development is the degradation of water and land resources, diminishing water quality and the desertification of river basins.

The falling level of the Aral Sea and its diminishing volume has given rise to quite a number of negative consequences:

- A dramatic deterioration in water quality and the population's health;
- Large-scale desertification, salinization and soil paludification;
- A reduction in biodiversity and an increasingly negative impact on the climate.

The prosperity of Central Asia is in many respects dependent on a natural balance being maintained in the area where the rivers are formed, namely the ecosystems of the Pamir, Tyan-Shan and Altai mountain ranges. These high mountain systems absorb moisture from the upper strata of the atmosphere that has, for the most part, been transported from the Atlantic Ocean by air masses, so that the mountains serve as gigantic reservoirs of fresh water. However, Central Asia's mountains are increasingly exposed to such degradation processes as deforestation and erosion, pollution and diminishing grasslands.

Since the middle of the last century the area covered by forests in Central Asia has seen a four- to fivefold reduction. Haloxylon and flood plain forests (tugai) have suffered greatly as a result of human activity. Over the last few decades, the area of forest along the Amu-Darya river alone has decreased from 150,000 hectares to between 22,000 and 23,000 hectares, and this process is continuing. The disruption of the hydrological river regime has a major impact on the degradation of tugai forests.

The destruction of ecosystems has led to a considerable decrease in biodiversity. The number of animal and plant types that have disappeared or are threatened with extinction is growing. In some cases these processes are irreversible.

3. A serious challenge is posed by Central Asia's rapid population growth at a pace outstripping the average global rate. Over the last 40 years the population of Central Asia has increased by a factor of 3.5.

The population increase has been aided by economic intensification, resulting in:

– Increased pressure on water resources and water stress;

– A reduction in per capita water supply.

With the river run-off volume remaining constant, the rise in the region's population is leading to a growing shortage of water. Central Asia's water resources are already virtually exhausted as it is.

Central Asia's average available water supply is diminishing at a rapid pace. Over the last 40 years it has fallen from 8,400 cubic metres per year per person to 2,500 cubic metres per year per person and is likely to drop even further.

If the current population growth rates continue, by 2030 this figure will reach the critical value of less than 1,700 cubic metres per year. This means an additional 500 to 700 million cubic metres of water will need to be found each year if Central Asia's population is to meet its most basic water consumption needs.

The governments of the IFAS member States need to find long-term solutions to these problems, devising a realistic long-term strategy for the basin's environmentally sustainable development and taking into account the economic interests of all the member States. An optimum balance between economic and environmental interests through integrated water resources management at the river basin and regional levels should be the main focus of any such strategy.

In his statement at the summit meeting of the Central Asian Heads of State on 28 April 2009, the President of IFAS, President Nursultan Nazarbayev noted that it would be possible to make greater use of the OSCE's potential in resolving regional environmental problems within the economic and environmental dimension of the Organization. Kazakhstan's Chairmanship of the OSCE would make it possible for the region to highlight the importance of the Aral Sea question and to try to establish a proper dialogue on this subject within this major regional organization. One of the practical solutions within the OSCE could be an initiative to create mechanisms for monitoring and finding a preventive response to environmental threats.

On 19 November 2009, a Memorandum of Understanding was signed in Almaty between the Republic of Kazakhstan as the country chairing IFAS and the OSCE Centre in Astana on water security issues and the promotion of the programme of action to provide assistance to the countries of the Aral Sea basin during the period 2011 to 2015 (ASBP-3). It was the first time in the history of IFAS that such an agreement had been signed with the OSCE. This co-operation will be geared towards implementing targeted measures and helping to strengthen and expand the potential for improving the socio-economic conditions for the population living in the Aral Sea basin, preventing environmental threats and reducing the local and global consequences of the drying up of the Aral Sea. The parties agreed to jointly implement projects and programmes with the involvement of local non-governmental organizations and experts and to organize conferences, round tables, meetings, seminars, presentations, etc.

In accordance with the Memorandum, preparatory work is under way on a pilot project for the introduction of an integrated water resources management (IWRM) system in the Kazakh part of the Aral Sea region. The aim of the project is to improve the socio-environmental situation in the part of the Aral Sea region belonging to Kazakhstan. With the aid of IFAS's expertise, projects will be carried out in six principal spheres:

- Improving national legislation with respect to water resources management;
- Improving the organizational structure and formation of intersectoral partnerships in the use and protection of bodies of water;
- Enhancing the effectiveness of water resources use through the implementation of an IWRM system;
- Creating information analysis systems for water resources management;
- Monitoring wetlands;
- Developing international co-operation and improving the management of transboundary bodies of water.

This project will provide a prototype for co-operation among OSCE representatives on the ground at each of the national branches of IFAS in the Central Asian States. Depending on the experience gained from the forthcoming project, future projects at the national level of integrated water resources management in the Aral Sea basin may be carried out in other countries.

In view of the vulnerability of water resources as a result of the climate changes expected in the future and given the absence of co-ordinated regional mechanisms for the joint use of water resources in the Aral Sea basin that take future challenges into account, the Kazakh branch of IFAS has proposed a number of OSCE projects. One such project is the creation of mechanisms for monitoring and finding a preventive response to environmental threats as a means of strengthening regional security (using the Aral Sea as an example).

IFAS and the OSCE Centre in Kazakhstan held a round table in Kyzylorda from 17 to 19 May 2010 on contemporary problems and potential solutions for water and environmental security in the Kazakh part of the Aral Sea region. The aim of this event was to increase the attention paid by foreign countries and international financial institutions as well as major foreign and domestic companies working in the Aral Sea region to resolving the socio-economic and environmental problems of the population living in the area affected by this environmental disaster.

Representatives from 20 embassies and 15 international organizations accredited in Kazakhstan took part in the round table along with representatives of 11 ministries and departments, 7 international projects and members of water management organizations, research institutes and public associations in Kazakhstan. The OSCE is providing invaluable assistance in this work. A visit to the northern part of the Aral Sea was organized for the embassy representatives by the OSCE Centre in Astana to help our partners not only familiarize themselves with the true severity of the problem but also to see the successes that have been achieved by the Government of Kazakhstan in rehabilitating part of the sea and helping to solve environmental and social problems as well as the population's health-related problems.

Since the OSCE's work has always been based on the comprehensive concept of security, there is no need to point out that environmental challenges are frequently closely connected with problems concerning the other "baskets" of security. As you are aware, disputes about water resources in Central Asia are the most persistent stumbling block standing in the way of regional co-operation. IFAS is playing a key role in resolving these extremely complex and difficult issues from both a professional and political point of view.

We need to make maximum use of Europe's positive experience in the co-ordinated management of water resources – in particular, the introduction of the principle of integrated water resources management to help develop and manage water, land, energy and other resources.

The Kazakh Government is making great efforts to support and strengthen IFAS, turning it into a key regional mechanism for information exchange, analysis, dialogue and, ultimately, the drafting of specific proposals as to how the Central Asian countries can manage their shared water resources effectively and rationally.

The allocation by Kazakhstan of financial resources – up to 2 million United States dollars per year – is just one part of these efforts. The personal involvement of President Nazarbayev is of decisive importance, helping to attract the necessary political will for the development of IFAS and its regional organizations as part of a modern-day architecture of regional organizations for integrated water resources management. The meeting in Almaty in April 2009 of the Heads of State of the countries that founded IFAS provided a serious and undisputed mandate for this work.

The United Nations Economic Commission for Europe (UNECE) programme entitled "Regional dialogue and co-operation on water resources management in Central Asia" not only provides support in strengthening IFAS but is also being carried out in close partnership with the IFAS Executive Committee and with its direct involvement. The programme is financed by the German Government through the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) within the framework of the Berlin Process, which is in turn part of the water and environment component of the European Union's Strategy for Central Asia.

The implementation of all these tasks must involve the constant improvement of the institutional and legal framework available for responding to challenges appropriately.

The Central Asian region currently has quite an established but by no means perfect legal framework for inter-State co-operation in the management and use of transboundary water resources. From a legal point of view, this framework includes both binding instruments and countless semiformal agreements and documents providing recommendations. These semiformal documents are usually referred to as "soft law" instruments. From the point of view of geographical coverage, the existing system for the regulation of transboundary water co-operation under international law has two levels: in addition to regional agreements of a more general nature, there are also a number of bilateral agreements on practical issues concerning specific watercourses or areas of interaction.

Regional instruments

1. The system for the legal regulation of co-operation with respect to water in Central Asia is based on regional and subregional (with a limited number of participants) agreements, with the central role being played by the 1992 five-party agreement on co-operation in the joint management, use and protection of the inter-State sources of water resources (with the involvement of all the Central Asian States). Instruments at the regional level include the 1993 agreement on joint actions to address the problems of the Aral Sea and the surrounding region, environmental rehabilitation and ensuring the socio-economic development of the Aral region and the 1998 intergovernmental agreement on the use of water and energy resources of the Syr-Darya river basin (with the involvement of four countries – Kazakhstan, the Kyrgyz Republic, Uzbekistan and Tajikistan).

The Framework Convention on Environmental Protection for Sustainable Development in Central Asia of 2006 should play an important role in regulating under international law activities concerned with the protection and use of water resources. A number of the Convention's principles and important provisions deal directly with water resources. The Convention has currently been signed by three countries – Kyrgyzstan, Tajikistan and Turkmenistan – and is not yet in force.

2. Institutional instruments have a particular role to play amongst regional arrangements, creating a legal basis and determining the legal status, position, competence and sphere of action of the co-operation bodies in the Central Asian countries as regards the management and protection of the region's water resources.

3. The third group of regional instruments determining common principles and areas of water co-operation in Central Asia take the form of periodic recommendations, declarations and statements issued by the Central Asian Heads of State, and bilateral treaties.

Distinguished participants,

In the joint statement by the Central Asian Heads of State at the IFAS summit held in Almaty in April 2009, attention was called to the challenges faced by the Central Asian countries in recent years.

In this connection, bearing in mind the importance of IFAS's work under these conditions, the Heads of State reaffirmed their interest in the elaboration of a mutually acceptable mechanism for the integrated use of water resources and environmental protection in Central Asia, taking into account the interests of all the countries of the region, as well as in continued co-operation with a view to improving the environmental and socio-economic situation in the Aral Sea basin.

This was made clear in the specific tasks set for the Executive Committee by the presidents of the countries governing IFAS:

- The further improvement of the organizational structure and treaty framework of IFAS with a view to enhancing its effectiveness and ensuring more active co-operation with financial institutions and donors in the implementation of projects and programmes to help solve the problems of the Aral Sea basin;
- The involvement of experts and donors in the elaboration of a programme of action to provide assistance to the countries of the Aral Sea basin during the period 2011 to 2015 (ASBP-3).

This Aral Sea Basin Programme should become a key instrument for the targeted and well co-ordinated international support of efforts by the countries that founded IFAS. It is designed to provide a framework for information exchange, analysis and strategic planning as well as for the co-ordination, monitoring, evaluation and implementation of projects by IFAS member States and donors working in close partnership with them.

The Programme should focus on the following principal areas:

- The integrated use of water resources taking into account the interests of all the States of the region;
- Environmental issues;
- Socio-economic issues;
- The improvement of institutional and legal mechanisms.

Around 60 experts from Central Asia, the EU, UNECE, Germany and other countries were involved in the Programme's preparation.

A number of issues with respect to increasing the effectiveness of regional co-operation arose in this connection:

- The need to accede to international conventions or draft a regional package of agreements on transboundary bodies of water, taking into account the principles for the distribution of water and the balance between water and energy regimes in water use;
- The need to improve the IFAS structures, strengthen its mandates and adopt a new agreement on IFAS among the parties and a charter of its structural bodies, taking into account the United Nations resolution adopted on 11 December 2008 granting IFAS observer status in the United Nations General Assembly;
- The creation of a single database recognized by all the countries of the region and providing meteorological, hydrological and environmental information;
- Increasing the awareness of the population and its interest in water and environmental issues;

- The development of a network of educational and training centres for farmers and other water users;
- The reform of water resources management on the basis of a system of integrated water resources management;

The national basin councils have a considerable role to play in devising a system of integrated water resources management within the national borders of river basins.

Important issues at this level include a fundamental improvement in the technical condition of water management systems, programmes to combat salinization, land improvement measures, the drafting of a water usage pricing policy acceptable to every country and a programme for the socio-economic development and environmental security of the basin.

- The elaboration of regional guidelines for water monitoring and information exchange, including:
 - The elaboration and adoption of a single method for the standardization of data collection and exchange;
 - The expansion and equipping of monitoring stations, weather stations and hydrologic gauging stations;
 - The elaboration of a regional programme entitled "The effect of climate change on water resources in Central Asia".

Of course, integrated water resources management at the regional level makes no sense unless the countries of the region devise a similar approach and mechanisms at the national level. Water policy dialogue conducted at the national level by the UNECE and the Organisation for Economic Co-operation and Development and financed by the European Commission, several EU countries and Switzerland is aimed at helping to draft national laws, co-ordination mechanisms and institutional mechanisms for integrated water resources management.

The current programme to strengthen IFAS and its regional organizations is expected to provide the Central Asian governments with powerful instruments not only for resolving existing problems but also for dealing with new challenges as they arise. Although the existing institutions have so far managed to deal with the joint management of shared water resources and avoid open conflict, the IFAS member States must work together within this regional framework of co-operation even more closely and more effectively if they are to cope with the challenges ahead.

Within the framework of future co-operation between the Kazakh IFAS office and the OSCE Centre in Astana, the following areas of joint activity could be pursued:

- Using the EU's experience in the elaboration and implementation of a Central Asian water directive;

- Establishing mutually acceptable economic mechanisms for the joint management of water and energy resources in the Aral Sea basin;
- Introducing a system of integrated water resources management in the Central Asian region;
- Improving the environmental and socio-economic situation in the Aral Sea basin;
- Employing modern methods for monitoring transboundary river basins;
- Developing the use of non-traditional energy sources;
- Water quality management.

The IFAS Executive Committee urges the OSCE participating States to support the proposal regarding the creation of mechanisms for monitoring and finding a preventive response to environmental threats in the Aral Sea basin, and to provide financial and technical assistance and help in the elaboration and implementation of regional projects as regional security-building measures in Central Asia.

I hope that the sincere political will and great efforts being made by Kazakhstan as the country chairing the OSCE and IFAS will make it possible to lay sound foundations and ensure the political momentum needed for a sustainable and comprehensive process of strengthening regional co-operation in Central Asia.

The OSCE community has played and must continue to play a most important role in these efforts. Working with the Central Asian countries as partners, entrusting the Chairmanship to one of them, promoting a comprehensive concept of security and making every effort to resolve extremely difficult and delicate regional problems, the OSCE is playing an essential role among international and regional organizations and the community working in the area of development.

The IFAS Executive Committee hopes that it will be able to make full use of this kind of support in the years ahead.

Thank you for your attention.