ACCESS TO ADEQUATE QUANTITY AND
QUALITY OF WATER IS A BASIC HUMAN RIGHT

A STRATEGIC POLICY FRAMEWORK FOR THE WATER SECTOR

TRANSITIONAL ISLAMIC STATE OF AFGHANISTAN
MINISTRY OF IRRIGATION, WATER RESOURCES AND ENVIRONMENT (MIWRE)

(Final Draft)

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INTRODUCTION

The Need for Policy Development: This policy document is an overall framework and intends to guide the Ministry of Irrigation, Water Resources and Environment (MIWRE) in setting general direction for the ministry over the next 20 years. Specifically, it aims to set guidelines for its institutional reform processes, as well as for the implementation of MIWRE's **12 year strategic plan** for 1383-1394 (2004-2015).

Almost 80% of Afghanistan's population derive their livelihood from the agriculture sector. Consequently, the government has made development of water sector one of its major **national priorities**. In order to achieve overall objectives in the water sector, specific **laws, rules and regulations** must be developed. Existing water law and regulations might require to be revised, while additional ones will be developed to effectively respond to the growing needs of the communities in the water sector. The role of the **communities and the private sector** in the management, use and development of the water sector also need to be defined. Similarly, this document will be used as the basis for the development of a number of **sub-sector** policies and strategies, such as Water Resources Management, Irrigation and Environment. In addition, specific policies, strategies and acts will be developed, as may be required in the near future, including:

- **Water Resources Regulations, including a Water Resource Act, for both the surface and ground water resources;**
- **Irrigation Regulations (small and medium community-based, and medium and large-scale public irrigation facilities);**
- **National Water Supply and Sanitation Policy; and**
- **Hydropower Development Policy.**

Afghanistan is landlocked and mountains cover most of the country, with limited amount of water available in the country. **Total arable area** in Afghanistan is around **7 million hectare** of which around 3 million was under irrigation. About **90%** of the irrigated area in the country is irrigated through **traditional irrigation** schemes, while the remainder is under formal irrigation. Average **annual rainfall** is estimated at around 240 millimetres and varies in different parts of the country. Annual rainfall ranges from 1200 millimetres in the higher altitudes of the northeast, to 110 in the southwest. Snow falls principally in the mountainous regions and higher altitudes of the Northeast and the Central Highlands regularly, while the rest of the country has varying snow fall. The last cycle of drought has reduced the size of glaciers in the country, posing additional problems in longer-term.

Regional variation in water availability scenario poses another challenge. The country is divided into five major river basins: The Amu Darya Basin; Northern River Basin; Harirud-Murghab Basin; Helmand River Basin; and the Kabul-Eastern Basin. They have varying water availability and consumption situation. Recent studies show that Amu Darya Basin covers about 14% of area but holds about 60% of water flow; whereas Helmand with 40% area coverage holds only 11% of water flow. Kabul-Eastern River Basin, with an area coverage of about 12% holds around 26% of the water flow, while population density in this basin ((93) is the highest, compared with 22-33 in the other four basins.

Since the fall of *Taliban* in late 2001 and the establishment of the Afghan Interim Authority (AIA), a significant number of international organisations, UN agencies and NGOs have arrived in Afghanistan to participate in the implementation of a large-scale reconstruction and humanitarian programmes, whilst the Afghan Government is trying to carry out a process of reform and transformation to be able to effectively respond to the growing needs of the Afghan communities. Over two decades of war and conflict, the absence of a stable government and the destruction of most public institutions, NGOs and the UN agencies have played a significant role in response to growing humanitarian needs of the communities in Afghanistan. However, **most projects** and programmes have had an **emergency and humanitarian character** and have therefore failed to effectively respond to the mid-term and longer-term needs of the communities. Lack of specific national policies and strategies has deteriorated the situation and will have lasting consequences on the country.

Afghanistan's rich **community-based structures** and Water Users' groups (such as *Mirabs*) have been **badly damaged** and/or have been replaced with local groups dominated by the power structure in many parts of the country.

In the face of these huge challenges, MIWRE's major strategies will emphasise a number of inter-related actions and interventions to effectively respond to the growing water needs of the Afghan society. **Short-term emergency** rehabilitation and reconstruction programmes, within the framework of this policy, will be required to respond to the **immediate needs** of the communities and assist the country to retain what was there prior to the war, while mid-term and longer-term **large-scale strategies** will be required to ensure **sustainable** use and management of Afghanistan's **water resources** and its natural resource base.
Therefore, the present policy document will shed light on major strategies and interventions, especially in the implementation of MIWRE's 12-year strategic plans for 1383-1394 (2004-2015), as well as for its annual National Development Budget for 1383 (March 2004-March2005).

Background to the Development of the Water Policy Framework: During the years 2002 and 2003, several events took place and policy development process was in motion within the MIWRE. Assisted by international consultants, the ministry drafted an initial outline of its major policies and strategies already in October 2003 (Water Resource Management Policy and Water Resource Management Strategy).
This document followed the "Kabul International Conference on Water Resources Management and Development", organised by the MIWRE and UNICEF from 29 April to 1 May 2002, which was concluded in the drafting of a common understanding under **"Kabul Understanding on Water Resources Management and Development in Afghanistan",** hereafter called the "Kabul Understanding."

Recognising the priority, urgency and high level commitment of the government to water resource management and development in Afghanistan, the Kabul understanding outlines a number of major issues to be addressed in an integrated manner in the short- and mid-term, including:

- **Doubling the present level of coverage by 2005**, as part of our Millennium Development Goal, through use of appropriate technologies and recharge of

the ground water, meeting **universal access** for all to adequate safe drinking water through improved water sources **by 2015** in line with the Third World Water Forum Resolution of Kyoto from March 2003;

- The importance and urgency of irrigation for meeting the food **security needs** of the country and the promotion of agriculture exports, through rehabilitation and reconstruction of existing and development of new small-, medium and large-scale national irrigation facilities, while keeping a **balance between sustainable environmental management and farming**;
- Recognition of the considerable potential for the exploitation of **hydropower** for electricity generation in the country;
- Full endorsement of the principles of **conservation and preservation** of the **environment** in all aspects of water resource management and development;
- Agreement on the principle that efficient and effective management of water resources is only possible through a **coordinated approach** and in **partnership** between national and international actors;
- Finally the resolution called upon the government to take note of the observations and agreements and to incorporate them in the future policies, legislation and in their implementation processes.

Similarly, a workshop on "**Management and Development of Water Resources and Environment in Afghanistan"**, jointly organised by the MIWRE and FAO 19-22 January 2004, where representatives of water users from different zones of the country also participated, was concluded with a "Declaration". The following are some of the major points agreed in the final declaration:

- Water policies and strategies should correspond to the **demands of the water users** and to water availability;
- Existing **water law** should be revised and **new legislation** should be drafted as soon as possible, based on the present and future needs of the country;
- A **working committee** (Inter-Ministerial) should be established at the national level, involving relevant stakeholder representatives;
- **Food security**, ensuring access to safe **drinking water** and addressing the needs for **industrial water** were identified as **priorities** and the meeting agreed that these and other national and local needs will be best addressed through the creation of **River Basin Authorities** in the country;
- **Environmental and social issues** must be considered during planning, design and implementation of irrigation and water resources projects;
- **Capacity building** must be addressed in a holistic manner to enable ministry staff to effectively respond to the growing needs in the water sector, technical as well as managerial;
- The role of the **private sector**, **water user associations** and community participation- particularly in small and medium scale rehabilitation- are highlighted as essential components of a sustainable water resources management and use;
- **Ground water use** must be regulated for domestic, agriculture, and industrial use;
- The government must strive to achieve a **balance** in access to water between **rural and urban areas**;

- A **draft environmental law** must be produced as the basis for the protection of natural resources, water resources and the environment, avoiding negative environmental impacts especially when irrigation schemes and similar projects are undertaken.

Finally, in March and April 2004, a series of **internal and external meetings** were undertaken to prepare a first draft of this strategic policy framework. The first draft was prepared by a **working group**, made up of senior ministry officials and external advisors, by the end of March 2004 and endorsed by His Excellency, the Minister of Irrigation, water resources and Environment. The draft framework was circulated among all stakeholders, relevant line ministries and MIWRE's international development partners for comments, suggestions and possible changes. In two separate meetings on 18 April 2004, one with national stakeholders and another with our international partners, comments and suggestions for changes were collected and have now been incorporated in this final draft, as far these were feasible, acceptable and possible.

SITUATION ANALYSIS

The Water Resources Sector of Afghanistan has gone through several **institutional changes** over the last three decades. In the 1970s, the Ministry of Water and Power (MWP) administered the irrigation and hydropower sub-sectors; the Ministry of Public Works administered the urban water supply and sanitation, while the Rural Development Department administered rural water supply and traditional irrigation. In 1988, the Ministry of Irrigation and Water Resources (MIWR) was created, along with the Ministry of Power, with the former in charge of hydrological networks and the development of water resources, as well as large-scale irrigation facilities.
With the fall of *Taliban* in late 2001 and the establishment of the Afghan Interim Authority (AIA) MIWR's mandate was further expanded with the responsibility for Environment, that resulted in the establishment of the Ministry of Irrigation, Water Resources and Environment (MIWRE).

Before the **war and conflict**, only 25%-30% of Afghanistan's water resources were utilised. However, available data and information indicates that **current utilisation** has further decreased by half compared to pre-war situation, resulting in:

- Vast majority of the population in Afghanistan, especially in the rural areas, has **no access to safe and adequate drinking water**;
- Compared to other countries in the region, Afghanistan has the **lowest water use per capita**;
- There is growing incident of **water-borne diseases** in the country, with little or no medical assistance available;

The impact of the 24 years of war and conflict, coupled with four years of persistent drought from 1378-1381 (1978-2001) has not only had devastating consequences on the agriculture sector, but has also led to a **large-scale displacement** of the population within the country and has forced tens of thousands of people to seek refuge in the neighbouring countries.

Animal husbandry, the second major source of food for most Afghans, after agriculture, has also had devastating effects, as a result of lack of security in most parts of the country and the continued reduction in fodder production. Animal herds among settled farmers have been reduced by over 50%, while Nomads (*Kutchies*) have lost up to 70% of their herds. It is worth noting that animal herding is the only source of survival for the latter group.

Uncontrolled and deliberate cutting of forests in different parts of Afghanistan, accompanied by four years of severe draught has also had devastating **consequences** on Afghanistan's **natural resource base and its environment**. Vast areas of forests have been cut down and sold outside the country for illegitimate profit making and by the communities to cover their need for fuel. Continued cross-border timber trafficking is further depleting the little that has remained. Natural plants have dried out from the roots and vast areas of wild pistachio and other forest nuts have witnessed similar effects.

Continued **lack of access to sufficient water supply**, long-term refugees and local and regional unrest and drought have all had their role in the desertification of large areas around the country and has led to the reduction of irrigated land from around 3 million hectare to around 1.5 million hectare, presently.

Deteriorating and almost diminishing **management capacities** of both public and private sectors, and community-based institutions and lack of access to basic intensives over 23 years of war has prevented the government from maintaining existing water infrastructure and the implementation of its development plan on one hand. On the other hand, external agencies, such as NGOs and UN agencies that have been involved in the humanitarian assistance have failed to effectively respond to the mid-term and longer-term needs of the communities, concentrating their efforts on emergency relief programmes. Especially the creation of parallel local institutional structures and so-called councils (*Shuras*) under the control of local warlords and power structure, have corrupted the traditional **community-based structures.** Most have relied on local warlords for reasons of security and to ensure continuity in implementation of their programmes. However, over the last two years, since the establishment of the Afghan Interim Authority (AIA) followed by the establishment of the Transitional Islamic State of Afghanistan (TISA), many NGOs have began improving their working style and traditional community structures have began a slow process of revival.

Government institutions are not only old-fashioned in systems and structures, but have been further deteriorated with the loss of most of their professional and qualified staff. Some have been killed during the war, a significant number has fled the country and those in the country have mostly joined NGOs and other international organisations as the government has failed to secure their retention with adequate salaries and benefits. Present government institutions have weakened considerably and are not in the position to respond effectively to the growing needs of the communities.

Like public institutions, the **private sector** has witnessed devastating destruction and setbacks and is not willing to participate actively and invest in the sector, as long current political and economic insecurity prevail in the country.

Afghanistan's **social and economic infrastructure** was weak before the war and was further destroyed as a result of continued insecurity, instability, conflict, lack of maintenance and absence of appropriate management.

Water distribution and water rights systems (*Haqaaba*) has been disrupted and similar community-based and traditional structures that were able to respond to the water distribution needs have been weakened significantly, with local power structures taking control of most structures, causing conflicts at local, regional and provincial levels. Conflicts have further intensified between upstream and downstream communities, as a result of unfair distribution, especially disadvantaging downstream communities.

ISSUES TO BE ADDRESSED

Afghanistan's natural resource base and its institutions have witnessed severe damage during 23 years of war and conflict, coupled with four years of persistent drought (1998-2001). To address major issues and challenges ahead, a number of **inter-related policies and strategies** will be required. It requires a series of **institutional reforms** and transformations to be able to effectively respond to the growing needs of the communities. Similarly, a set of short-term and mid-term, as well as longer-term policies and strategies are needed to revive the situation to pre-war level and further development plans are required for longer-term **sustainable use of natural resources**. The **water sector**, as an essential part of the natural resources sector will have to address a series of issues that have significant impact on the natural resource sector, from water resource management to irrigation and environment. These include **general and legal issues**, water supply and sanitation issues, irrigation and hydropower issues, as well as social, environmental, institutional, and international issues and issues related to information and communication systems.

Legal issues include:

- Lack of implementation of regulations and laws of water rights and water and land ownership;
- Absence of an international water agreement;
- Lack of sufficient laws and law enforcement mechanisms to control growing illicit crops; and
- Even though central government has committed itself to a private sector-led economic growth, lack of adequate legal provisions to encourage private sector participation in development programmes is visible.

Water Supply and Sanitation issues include:

- Lack of adequate planning, design and construction of water supply and sanitation programmes and appropriate coordination mechanisms;
- The need to ensure minimum sanitation and water supply per capita;
- Lack of appropriate approaches towards rural water supply and sanitation systems;
- Urgent need for improved management of existing water supply; and
- The need to establish quality standards for drinking water and control of water related diseases.

Irrigation issues include:

- Lack of demand-driven irrigation approaches;
- Poor performance of existing irrigation systems (water losses of more than 60% from water source to land);
- Weak management and institutional capacities;
- Badly damaged local/community-based water users structures and associations (*Mirabs and* community-based *Karez* management institution);
- Lack of voluntary participation of communities in the rehabilitation and maintenance of infrastructure, poor public awareness and poor local technical knowledge, poor economic conditions, coupled with the lack of access to appropriate technologies and local investment; and
- Reduced water use efficiency (to around 25-30%).

Hydropower issues include:

- The vast need for access to electricity in both rural and urban areas and improved power system planning;
- The need to encourage and promote the private sector to invest in the hydropower sub-sector and participate in operational management; and
- Strategies to reduce the costs of hydropower development; and
- The need to achieve National self-reliance in power generation.

Environmental issues include:

- Absence of integration of environmental considerations into planning water resources development;
- Lack of implementation and enforcement of Environmental Impact Assessments (EIA) and Strategic Environmental Assessments (SEA) norms and standards;
- Urgent need to conserve bio-diversity (flora and fauna);
- Substantial decrease in water resources and low water table of ground water as a result of persistent drought and uncontrolled exploitation;
- Lack of public awareness of environmental issues;
- Continued landslides, erosion, sedimentation and flooding as a result of continued degradation of the environment; and
- Lack of appropriate approaches for watershed management and water conservation.

Social issues include:

- Widespread poverty and malnutrition, as a result of continued food insecurity;
- Low level of female participation and mainstreaming gender issues into water resource management;
- Lack of access to appropriate technology for primary social target groups (vulnerable and disadvantaged groups); and
- Large-scale rural to urban migration, influx of returning refugees into the urban areas, caused by lack of access to economic resources and deteriorating security situation.

Institutional and International issues include:

- Badly damaged public, private and community-based institutions, including severe lack of professional/technical and management capacities;
- Shortage of effective central and provincial planning organisations;
- Lack of an effective mechanism to regulate and clearly define responsibilities and mandates of different Government institutions and stakeholders involved in the water sector;
- Insufficient regulatory institutions and frameworks and overlapping mandates;
- Inadequate coordinated and integrated development policies and strategies;
- Absence of a general framework and mechanism for institutionalised cooperation for the development of trans-boundary rivers.

Furthermore, issues related to **information and communication systems** include an almost complete breakdown of the systems; absence of hydro/agro-meteorological network and systems, as well as lack of drought and flood forecasting and warning system and similar facilities for other natural disasters. Shortage of appropriate professional colleges and access to **training institutions** on water resources in the country continue to hamper efforts in the reconstruction and development processes.

While some of the above mentioned issues may require separate attention including developing sub-sector policies and strategies, as well as rules and regulations, which may require substantial time, there are also some specific issues that need to be addressed as the **most urgent** ones in this policy framework and the subsequent policies and strategies for the three sub-sectors, Water Resource Management, Irrigation and Environment. These issues are:

- Strategies and policies that will have positive role to i**mproved livelihood** of the population of Afghanistan in general;
- Strategies and policies that will have a positive role in improved use and proper **management** of water resources;
- Rehabilitation and development of water resource **infrastructure** and appropriate mechanisms to properly maintain infrastructures;
- Improved and **equitable water distribution** systems, increased usage of available water resources;
- Support to and promotion of local, regional and inter-provincial **institutions and community-based organisations**, such as *Mirabs*, *Shuras*, and promotion of similar water user associations;
- Establishment of an effective **coordination mechanism** at all levels, village, district, province and national, including relevant government institutions;
- Development and issuance of appropriate **laws, rules and regulations** for improved management of water resources, including modification and changes in the existing laws and regulations as deemed necessary;
- Development and establishment of an effective **coordination mechanism** between public institutions, the private sector and international agencies involved in the sector;
- Creating appropriate understanding **with neighbouring countries** for improved and increased utilisation of available water resources;

- Development and establishment of specific laws and regulations for the **protection of the environment** and prevention of further destruction based on sustainable development principles and in accordance with appropriate international norms and standards for the environment for the benefit of both the present and future generations;
- **Prevention of** further ineffective **emergency programmes** and plans and promotion of an appropriate environment to encourage both national and international development partners for the development of longer-term **sustainable development plans and strategies** that will encourage longer-term investment in the protection and development of the water resources and environment in particular and of the natural resource base in general; and
- Development of appropriate laws and regulations that can promote and **encourage private sector** investment and participation in the management and development of irrigation systems and water resources management.

VISION

Our vision is improved livelihoods of the society through Promotion and implementation of integrated socio-economic development and sustainable use of natural resources, based on international environmental norms and standards, leading to prosperity, peace, social justice and equity in Afghanistan.

MISSION

Our mission for the next 20 years is the formation, development and implementation of policies, strategies and regulations, in close cooperation and coordination with other stakeholders, including institutional reform and transformation, as the basis for a vibrant, self-reliant rural economy, through quantitative and qualitative improved and increased production in the natural resources sector, based on the market demands and with active participation of the private sector, which will guarantee sustainable use of natural resources (land, water, forests and rangeland).

WATER SECTOR GOALS

Over the next 20 years, the water sector will have vital role, in coordination with other development partners, to enable most Afghan families to achieve food security and self-reliance, that will lead to improved livelihoods and economic well-being, who will have efficiently contributed to the national economy, through developing and improving the efficiency of the water sector, as part of sustainable development of the natural resource sector, in accordance with acceptable environmental norms and standards.

OVERALL OBJECTIVES FOR THE WATER SECTOR

The water sector of Afghanistan has gone through periodic changes in terms of institutional set-up and mandate. Overall, the **water sector** can be described as the **lifeline of the entire society** and appropriate policies are required to address some of the fundamental needs of the society through this sector. It is a complex sector and requires, therefore, a complex set of strategies to achieve its strategic goals.

Like all other national development, water sector development should aim to **improve the quality of life**, through:

- **Sustainable use** and effective protection of water resources, especially groundwater;
- **Reducing poverty** and unemployment, by ensuring **food security** through water security, by increased production and improved productivity in the agriculture sector;
- **Access to safe drinking water and sanitation** guaranteeing people's heath security;
- Satisfy **national energy** requirements through generation of sufficient hydropower, both in rural and urban areas;
- Contribute to the **national economy** by supplying the required water to present and future industrial and other economic sectors; and
- Control and mitigate **water-related disasters** and protect the environment and conserve bio-diversity of natural habitat.

Achieving these overall objectives will set out a number of related objectives as pre-condition, which include, among others:

- An **integrated approach to water resources management**, through the establishment and development of **River Basin Authority** and fundamental **institutional reform**, based on a decentralized management system;
- Promotion and encouragement of **traditional local organizations** and water users associations (*Mirab systems, Karez* management…) and communities' **active participation** in water resource management with sufficient capacities;
- Adapting appropriate approaches to **reduce the effects of droughts and floods**, to prevent further loss and damage to the communities, displacement of people, from affected areas and negative environmental impacts, in a sustainable manner; special attention will be required to respond to the needs of **Nomads (*Kutchies*)** both en route and during temporary settlement;
- **Protection of the environment** from further damages and destruction, its rehabilitation and development based on a sound **balance between economic benefits and environmental protection**; and
- Provision of necessary support and regulations to promote and encourage the development of an effective and **dynamic private sector** in the natural resource sector generally, and in the water sector especially, guided by the established national policies and guidelines.

POLICY ISSUES

The **National Development Framework** (NDF) outlines key policies for economic growth, **improved rural livelihoods**, and for **sustainable use and management of the natural resources**. At the heart of the sector policy are issues of **equity, water security, land ownership and tenure rights, and poverty alleviation** along with the development of human resources. **Gender, human rights and environment**, are addressed in the policy documents as the major cross-cutting issues and will be attended by specific strategies in the water and natural resources sector. The policies are based on **partnership** with all stakeholders, **community participation** and **private sector-led growth** and development, guaranteeing longer-term food security in the country. In the context of private sector-led macro economic guidelines prescribed by the NDF, agriculture sector is viewed as the main source of livelihoods for the country, with irrigation as the key contributor to the agriculture sector. Specific strategies will be designed to ensure a steady recovery of economic growth and mitigating hardship among the poor.

The NDF prescribes clearly the division of roles and responsibilities between the public and the private sector as follow:

The role of the Government:

- The Government of Afghanistan ensures security, human resources development, social justice and equality.
- The government will enable an environment for private sector production and marketing, intervening only where social justice or market failure requires.
- The Government will introduce appropriate monetary tools to control inflation.
- The government will develop and introduce certification and regulatory framework for efficient and effective use of water, agriculture, land, forestry, rangeland and other sectoral areas.
- The government will, furthermore, function as policy maker, strategiser, monitorer and evaluator of reconstruction and development processes.
- In this overall context of policy guidelines, the policy for the natural resources sector, in general, and for the water sector in particular will be based on partnership with all stakeholders, community participation in the management of natural resources and a private sector-led economic growth.
- Where government interventions are required to design and initiate specific programmes, it will make maximum use of the private sector, the contractors and other organisations and institutions already present in the field.

The role of the private sector:

- The private sector will be actively engaged in the agricultural inputs and services, including rural finance.
- The government will enable the private sector to access and use state-owned assets and property, and market information systems.

- The government will encourage and promoted the private sector to involve in the rehabilitation and development, as well as in the management of the water resources.

To achieve the sector objectives will require a range of **policy review and reform**. A number of key policy reviews are needed, which will build on the NDF identified policy reforms; a reform agenda and a work plan have already been developed and will be implemented over the next two years. The overall policy framework and the development of sub-sector policies and strategies are guided by the following general policy principles:

- Development of an **Integrated and holistic water resources management** is the best answer to sustainable development and management of water resources;
- Water resource management will be based on a **River Basin Approach**, that can ensure sustainable water utilization, conservation of the water resource base and protection and development of the environment;
- As part of the river basin approach, **water conservation and water harvesting** would receive special attention; promotion of water conservation for irrigation and other water uses and the environment will be considered in designing rehabilitation projects, based on increased efficiency and economically use of water;
- **Water delivery services** will be **decentralized** using a variety of autonomous and accountable agencies, including public, private and community-based water users associations and organizations;
- Water sector development will be based on active **participation of** and consultation with **all stakeholders**;
- Use of **trans-boundary waters** will be on equitable basis for mutual benefits;
- **Accountable and transparent institutional** and **legal frameworks** will be necessary, along with appropriate coordination mechanism, for improved management of the water sector; and
- The government will make maximum use of **appropriate technologies and best practices** in innovation technologies and institutional arrangements, respectively.

To implement the overall policy principles successfully, a number of specific policy guidelines and principles will require attention, including:

- **Social Development Principles include:**
    - water resources development will strike a balance between rural and urban areas;
        - rural needs will be addressed comprehensively through a number of specific interventions, especially in management and rehabilitation of irrigation, flood control and drought mitigation and rural water supply and sanitation;
        - urban needs will be also addressed through specific interventions, such as water utilities in cities for water supply and wastewater management;

        - similarly, interventions through multipurpose hydropower programmes will provide both rural and urban communities access to electricity;
    - improve health and living conditions of the society, through active participation of and ownership by communities in development processes;
    - targeted assistance should be provided to disadvantaged and vulnerable groups, including subsidised service delivery; appropriate water sector-related technology will be used that is simple, affordable, manageable and cost-effective and generates employment opportunities;

- **Economic Development Principles include:**
    - water resources development should make significant contribution to national economic growth, help reduce poverty and generate employment;
    - development of hydropower should be undertaken in a comprehensive approach that can satisfy domestic needs for electricity and national requirements, resulting in reduced environmental impacts;
    - irrigation development will be the main focus of the water sector development to increase food production and help the country eliminate its dependency on external food aid; introduction of appropriate technologies, including drip irrigation, will further assist farming communities to effectively use and manage available water resources;
    - sustainable development approaches require that the cost of irrigation and drinking water and sanitation will be borne by the users themselves; similarly, the cost of reducing water pollution will be borne by the polluters themselves;
    - the private sector will be encouraged and promoted to actively participate and invest in the operational capacity and capital, respectively.

- **Cost Recovery Principles Include:**
    - Under present circumstances, **water pricing** will not be possible. However, in the past drinking water systems in the urban areas charged the users for the installation and connection of homes. MIWRE will facilitate and promote the installation of **water meters in the future**, though this will be a responsibility of the **municipalities** and other water supply institutions that may be established.
    - In the **rural areas**, both drinking water and traditional irrigation were repaired, **maintained and organised by the users** themselves (*Mirabs* and *Karez* Management). However, rural communities' coping mechanism has been so deteriorated that even traditional irrigation requires initial financial support through Government's national programmes. Once these have been repaired, the organisation, management and maintenance will be the responsibility of the communities.

- **Environmental Sustainability Principles include:**
  - sustainable development approaches are based on sustainable management, protection and conservation of the natural resource base and the ecosystem, and technological and institutional changes must be based on the need of present and future generations;
  - sustainable growth requires that the rate of consumption of natural resources must not exceed their rate of generation;
  - sustainable management and development of water resources must take into consideration all aspects of the water cycle, all uses of water by the society and the maintenance of the integrity, ecological structures and function of watersheds.

In implementing the water sector framework, an important criterion will be **harmonising the sub-sector policies**, as well as other relevant policies, such as agriculture, rural development, power and other stakeholders. **Institutional capacity** will need to be strengthened to enable effective enforcement of necessary regulations. Similarly, an **effective monitoring and evaluation system** will be vital to monitor regularly the effectiveness and efficiency of the sector performance and to learn lessons in improving planning and programming for future development processes.

Coordination will be vital **at all levels** (national, provincial and local) for the successful implementation of the water sector policy, especially as there are numerous stakeholders involved in the sector. A first step to effective coordination will be the establishment of an **Inter-Ministerial Commission for water**, where major national sectoral policies and strategies will be devised.

Considering the involvement of numerous stakeholders in the water sector, one of the initial issues that would be addressed through the Inter-Ministerial Commission will be a clear **division of responsibilities**, among the different government institutions, especially with respect to water management and service delivery. MIWRE has identified the following areas to be defined through the commission, along with specific suggestions:

- **Urban water supply** would be addressed through a combination of different mechanisms, including the municipality and the private sector. Autonomous water supply institutions may be created to effectively handle urban water supply.
- **Rural water supply** is currently managed by the Ministry of Rural Rehabilitation and Development (MRRD). Future needs might be addressed through the establishment of Rural Water Supply Boards, which may be initiated and established through the MRRD local and provincial branches.
- **Irrigation water** will be developed and managed by MIWRE, however its delivery and on-farm management will remain the responsibility of the Ministry of Agriculture and Animal Husbandry (MAAH) and the farming communities themselves. **Irrigation extension** will be the joint responsibility of MAAH, MIWRE and water user organisations (*Mirabs*) and the farmers. While MIWRE will bear responsibility for the

rehabilitation and development of formal and semi-formal irrigation schemes and canals, MRRD will be in charge of all **traditional and secondary irrigation canals**.

- **Hydropowe**r will remain the joint responsibility of MIWRE and the Ministry of Water and Power (MWP), considering its multipurpose characteristic.
- **Underground water** resources will also be managed jointly by MIWRE and the Ministry of Mines and Industries (MMI). While MMI will be responsible to carry out research and studies that would determine the availability and quality of water, MIWRE will carry the responsibility for exploitation. A major issue to be addressed in this area will be regulatory framework to limit underground water use for drinking water and reserves only. The latter will especially apply to times of drought and other issues causing severe water shortage.
- **River Basin Authorities** will ensure fair distribution of water resources and manage issues related to upstream and downstream conflicts. Actual management and delivery of the water will be carried out through MAAH in close coordination with MIWRE.

STRATEGIC OBJECTIVES FOR THE WATER SECTOR

"Working together in Participatory management of water Resources"

Policy and strategy formulation is a dynamic and on-going process and needs to be monitored regularly and up-dated, especially during the transitional period in Afghanistan. This present policy framework and its specific strategies are intended to cover a period of 20 years as a response to the vast needs in the reconstruction and rehabilitation processes and will initiate the initial period of the longer-term development needs of the country.

In its 12 year strategic plan, the Ministry of Irrigation, Water Resources and Environment (MIWRE) has outlined **four broad strategic objectives** and is seeking close coordination and cooperation with relevant line ministries, especially the Ministry of Agriculture and Animal Husbandry (MAAH), Ministry of Water and Power (MWP) and the Ministry of Rural Rehabilitation and Development (MRRD). These objectives are:

- To establish improved water resource management systems, through adoption of a **river basin management** approach in the five river basins of Afghanistan.
- To **improve rural livelihood** through increased and improved production in agriculture by supporting rehabilitation and reconstruction work on priority small, medium and large scale traditional irrigation schemes.
- To improve livelihood, **agricultural production and hydropower generation** through rehabilitation, completion of existing large scale formal irrigation systems and by undertaking new large-scale formal irrigation programmes in an effort to **increase irrigation water**.
- To develop a **national capacity** for the management, conservation and regeneration of the environment.

Given the magnitude of the problems facing Afghanistan, there is a need for a complex set of strategic objectives, along with appropriate mechanisms of change management, to ensure the sustainability of changes. Time and patience will be required to manage change effectively within both the public and the private sector, as well as at the community level.

The following paragraphs describe some of the major interventions the water sector will undertake in the next 20 years:

INSTITUTIONAL REFORM

The role of the **government**, as described in the National Development Framework (NDF) is **shifting from implementer to facilitator and regulator**. The ministry will aim to increase its capacity in regulation, policy making, monitoring, evaluation, and provision of selected services in the water sector and fostering the establishment of partnerships. The longer-term objective is to **decentralise activities** that can be best delivered by other organisations, public or private, when they have reached the necessary level of development and have become accountable and transparent agencies. The establishment of the proposed river basin authorities will be a first step in this direction.

To bring the decentralisation of activities in line with the River Basin approach of the water resource management, the Ministry will reform its institutional set-up from the **present political-administrative** system away from provinces and districts to a **river basin set-up** with river basin, sub-basin and water-shed authorities.

Integrated Water Resources Management (IWRM) means decision-making concerning development and management of water resources for various uses at different levels. In this decision-making process the needs and desires of all different uses, users and stakeholders are taken into account. For this purpose MIWRE envisages to function at three levels, a **constitutional-, an organisational-,** and an **operational level**, in an integrated way:

1. **At Constitutional Level:** ***Ministry will directly be in charge of national planning, establishing laws, policies and strategies:*** to make the organisational function possible, an enabling environment has to be created, requiring water policies, institutional development policies, including human resources development and normative and executive legislation and coordination with other parties involved in the water sector.

To maximise the benefit from existing programmes and activities, a simple but functioning coordination mechanism is vital. MIWRE will coordinate with development partners and implementing agencies in issues of policy development, strategic interventions and institutional reform, in issues of joint development programming and fundraising, as well as specific needs in terms of capacity building. This will ensure:

a) efforts made by the different partners in the improvement of administration and capacity building will not be duplicated, thus saving substantial amount of resources and efforts that goes into individually designed support programmes;
b) the donor community and implementing agencies can contribute to the development of national policies and strategies.

Important issues that are **cross-sectoral** in nature, would be better reflected in the establishment of an **Inter-Ministerial Commission** for the natural resource sector. This will further enhance the quality of policies and development and

ensure an integrated approach to recovery and development processes. MIWRE will take the lead in this process.

2. **At Organisational Level:** ***River Basin Management Authorities will be in charge of allocating water flows, assimilative capacity, ecosystem maintenance, and potential energy.*** To minimise problems and conflicts of the different uses and users, coordination of water use and allocation is required, as well the development and/or changes of water use rules. Other activities involved will be coordination, planning, decision-making and policing of water use and users in water systems (river basins, aquifers).

MIWRE will initiate, legalise and support the establishment of River Basin Authorities in the five main river basins and will contribute to their planning and coordinate and monitor their performances.

3. **At Operational Level:** ***Sub-Basin – or Watershed management will be in charge of regulating water uses and users subject to operational rules, to meet demands and needs.*** Activities are focussed at use or control of water for specific purposes to fulfil specific needs and demands, including water supply and sanitation, irrigation and drainage, flood protection, hydropower, industrial supplies, tourism and recreation, fisheries, navigation and the preservation of rehabilitation of ecosystems. This level can be at sub-basin, watershed or micro-watershed.

MIWRE will, in close cooperation with the river basin authority, function as facilitator and adviser at this level. Specific activities by MIWRE will be awareness raising and promotion of effective and efficient use and involvement with the establishment/ strengthening of the water user organisations.
Integrated Water Resources Management requires integrated performances at and between all these functional levels.

For MIWRE to function effectively at these levels there is an urgent need for:

- Enhancement/strengthening of **planning and implementation capacities** at the Ministry and all stakeholders; the implementation of restructuring exercise of the Ministry (Institutional Reform Process) with Departments of Water Resources, Environment and Irrigation is a first step.
- Establishment of an **effective commission (Inter-Ministerial)** as a central coordination agency.
- Reorganisation and strengthening of **government institutions** that can effectively respond to the present and future needs of the country in the water sector.
- Promotion, initiation and strengthening of regional/local authorities in a **decentralised manner**, such as river basin authorities and of water management bodies at community level, such as *Mirab, Karez* management and other water user associations and organisations.
- Encouragement and promotion of the **private sector** in both capital investment and operation capacities in the water sector.

INTEGRATED WATER RESOURCES MANAGEMENT

"Water and Environment: A common Goal to Preserve!"

Considering the multiple challenges in the water sector, the government has recognised the need for integrated water resource management. The development of the river basin management approach by the MIWRE is a first step towards integrated water resource management. To achieve this, MIWRE will adopt the following principles in its policy as guidelines:

- National water resources development and management should be undertaken in a **holistic, integrated and sustained manner** to meet national development goals, as described by the National Development Framework (NDF).
- Planning, development and management of water resources would be **decentralised** to an appropriate level corresponding to river basin boundaries.
- Delivery and extension of water services would be delegated to **autonomous and accountable** public, private and/or cooperative **agencies** providing measured water services in a defined geographical area to customers and/or members for an appropriate service fee, ensuring longer-term **cost-recovery**.
- Water use in the society would be sustainable within a **transparent policy framework** – with incentives, regulatory controls and public education promoting economic efficiency, conservation of water resources, and protection of the environment.
- Water sector development **activities** would be **participatory and consultative** at each level, leading to commitment by stakeholders and actions that are socially acceptable.
- Successful water sector development requires a commitment to **sustained capacity building**, strategy development, budget funding, monitoring and evaluation, research, information services and learning at all levels.
- MIWRE will strive to address issues related to **shared water resources** within and between nations to be efficiently allocated for the **mutual benefits** of all countries affected.

Specific objectives of the water resource management are:

- Adaptation of the principle that **water is a public good** and water rights is a public right, that cannot be claimed and/or owned by any individual or organisation.
- Promotion of **equitable allocation** of water, addressing the social and environmental needs, and at the same time recognising its economic value.
- Creation of **mutual understanding and public awareness** and acceptance that while political boundaries are made by men, water boundaries are set by nature.
- Promotion of **effective and efficient use** of water.
- Assurance of **sustainable access** to water for family households.
- Assurance of a **sustainable environment**, particularly with abstraction and use of drainage, sewage and urban discharge of water.
- Creation and development of **appropriate institutions** for effective management of water resources.

- Promotion and encouragement of **stakeholders' interest and responsibility**, using appropriate consultation and involvement in decision-making.
- Promotion of **research, appropriate technologies**, and best practices that can provide a robust empirical basis for future policy development, as well as for enhancement of effective and efficient water use.
- Review and **harmonisation** of existing **legislation and regulations** and enactment of new appropriate legislations and regulations that can respond to longer-term needs of the water resource management and use.

IRRIGATION FOR AGRICULRURAL DEVELOPMENT

"The Management of Water Means: More Crop Per drop!"

In the socio-economic contexts of Afghanistan **irrigation is the most important water sub-sector**. Almost 80% of the population depend on agriculture for their livelihoods from agriculture, and over 95% of available water resources are consumed in the agriculture sector. Therefore, adequate access to irrigation water is an essential factor in achieving **food security** and self-reliance in food production. In the past, the agriculture sector was also a source of foreign currency earning, with the surplus in agriculture and animal husbandry, as well as other rural products being exported in the region.

There are **three categories of irrigation** facilities and systems in Afghanistan: (1) small scale rural irrigation that is mostly managed and maintained by the communities themselves, including the underground water channels (*Karezes*); (2) medium- and large-scale irrigation schemes managed and maintained by the public sector and the communities; and (3) underground water exploitation through shallow and deep wells, where research and studies are carried out by the Ministry of Water and Power, while exploration lasts with MIWRE.

Lack of maintenance and continued damage to most irrigation facilities has **reduced access to irrigation water** by more than 50%. In addition prevailing poverty in the country constrains the ability of the farming community to repair even local traditional irrigation facilities, reducing their participation in the reconstruction and development processes.

Objective to determine water availability, coupled with lack of access to most needed agriculture goods and services have already caused large-scale **displacement and population movement** both within the country and to the neighbouring countries. **Rural to urban migration** is beginning to have serious negative impacts on the processes of reconstruction and rehabilitation. Lack of agriculture support and access to irrigation water, with the four years of persistent drought, has had serious impacts on the rural economy, counting for one of the major reasons for some farming communities to go into **illicit farming practices**, such as poppy, making Afghanistan the biggest poppy producing country in the region.

In the **short- and medium-term**, the strategy for the irrigation sub-sector will concentrate on the implementation and promotion of sustainable and efficient irrigation systems, supporting the opportunities to **diversify and intensify agricultural** production in a manner to provide sustainable livelihoods for the farming communities, ensure food security and self-reliance in the country. **Food security** is defined as a condition in which all people, at all times, have physical and economic access to safe, culturally acceptable and nutritious food necessary to lead an active and healthy life.

To achieve these strategies, MIWRE will undertake the following activities:

- **Integrate irrigation planning** and management with agricultural and power development, based on the river basin approach.

- Implement **emergency irrigation rehabilitation** that will take community-based small irrigation systems as a priority, followed by repair and rehabilitation of **medium- and large-scale irrigation** schemes and development of **new irrigation** schemes at national level.
- Strengthen national and local **capacities of all stakeholders**, public, private and community-based organisations and water user associations for planning, implementation and management of irrigation.
- Improve and regulate **ground water** use, development and management.

Successful implementation of these activities will depend significantly on the following pre-conditions:

- Functionally effective **coordination and partnership** among all stakeholders, especially the irrigation and agriculture sub-sectors, the private sector, community organisations and water user associations;
- Securing adequate **financial resources** and their timely allocation for all components of irrigation and agriculture and rural development;
- Development of **alternative livelihood** and **alternative crops** to replace illicit drug cultivation, production and trafficking, along with employment opportunities for the large number of otherwise underemployed or unemployed people that are currently working in the poppy fields;
- Enforcement of national legislation and regulations to control **cross-border trading** that adversely affect agriculture in Afghanistan.

MIWRE has identified specific priority interventions in the irrigation sub-sector to address immediate needs in this area, including:

- Current share of **formal engineered schemes** in the water sector, especially for irrigation is around 10%. MIWRE is planning to increase formal schemes **up to 35%**. This will require development of a series of medium- and large-scale dams, which will guarantee **more water storage**.
- Improvement and introduction of specific **infrastructure interventions** in the **traditional irrigation** schemes, as part of an effort to upgrade these systems, will lead to more water storage and **reduce water loss**, through a series of rehabilitation and development programmes.

MULTIPURPOSE IRRIGATION AND HYDROPOWER DEVELOPMENT

Afghanistan's need for energy is vast. Even before the war the vast **majority of rural population** had **no access to electricity**. While the situation in some major cities has improved over the last two years, though with regular disruption, most rural people have no access to electricity. Power **infrastructure**, including dams, stations and supply and distribution systems have been **damaged** and will require many years to be re-established to reach the pre-war level.

MIWRE recognises the importance of hydropower development as a major source of electricity that will have positive impact on the environment too. The demand for fuel and electricity is growing with the rapid increase in population. MIWRE will concentrate on small scale hydropower interventions at this stage, making more human and financial resources available for other more essential services, such as clean drinking water and sanitation, irrigation, environment and the water resource management. Future strategies will further expand the role of hydropower in the overall developmental goals and objectives. All interventions in the hydropower sub-sector will be carried out in close coordination and cooperation and understanding with the Ministry of Water and Power.

To achieve its strategy in the hydropower sub-sector, MIWRE will coordinate and cooperate closely with the relevant line ministries, taking into consideration the following principle guidelines:

- Encourage the development of **cost-effective** small and medium hydropower projects to meet domestic needs at an affordable price.
- Encourage **private sector investment** in hydropower development and power distribution and service delivery on a competitive basis and under approved rules and regulations.
- Provide increased government support, human, technical and financial, to develop and implement **rural electrification** programmes.
- Integrate specific **social and environmental mechanisms** into all hydropower development processes.
- Encourage and promote **renewable and alternative energy** production for rapid recovery of environment.
- Encourage **power-based industries** and transportation system to create markets for larger hydropower generation plants.
- Facilitate financial resources from domestic sector to the hydropower sub-sector and develop and implement strategies for **cost-recovery**, as the basis for sustainable hydropower development that is environmentally friendly.
- Develop technical, managerial and institutional **capacities** at national and local levels that will be able to respond to both the immediate and longer-term needs of the country in hydropower development.
- Establish and develop an effective **coordination mechanism** among all stakeholders for more efficient development and exploitation of hydropower.

DROUGHT MITIGATION AND FLOOD CONTROL

Floods and droughts are two common phenomena in Afghanistan, often causing devastating damage, especially to the farming communities. Loss of lives, shelter and agricultural fields are some of the common characteristics of floods and droughts.

During the **spring and summer**, the **river flow** can be as high as five times of average monthly flow and as high as ten times of mean daily flow. Between 1976 and 2001, the UN humanitarian assistance has reported as many as 31 major floods, affecting 1.4 million people countrywide, killing some 18,700 people and causing about US$ 414 million **damage to the rural economy**. Some of the provinces mostly affected by floods include Badakhshan, Baghlan, Herat, Kabul, Jowzjan, Samangan and Takhar. Over the last two decades the floods with an estimated cost of US$ 0.5 billion have affected some half a million people.

In Afghanistan, **drought is another disaster** for the agriculture sector in particular and for the communities in general. The recent cycle of drought of 1998-2001 affected almost 90% of country and it is estimated that only 10% of the irrigation was not seriously affected by drought. Irrigated **wheat production**, for example, reduced by **35%** from the normal production of around 2.0 million tons to 1.3 million tons. **Rain-fed production** virtually **vanished** during the same period. It also resulted in a large-scale **displacement** of people within the country and migration to the neighbouring countries.

Therefore, the need to respond effectively to future droughts through effective measures in **drought mitigation**, will require specific **strategies** at national level. These will include measures before the drought occurs, during the drought and after the drought. MIWRE will design a set of specific strategies and interventions that can effectively respond to the long-term needs of the communities.

To achieve development strategies in drought mitigation and flood control, MIWRE will adopt the following principles as guidelines:

- Development of cost-effective water storage and dams that can reduce drought and flood damage through appropriate measures for rain and flood water harvesting and storage; this will also assist in recharging the aquifers and will have positive impact on the environment, consequently leading to local water security;
- Introduction of drought resistant plants;
- Securing government and donor financial and technical support in drought mitigation and flood control programmes;
- Developing technical, managerial and institutional **capacities** at national and local levels that will be able to respond to both the immediate and longer-term needs of the country in relation to droughts and floods;
- Establishing and developing a **coordination mechanism** among all stakeholders for effective and efficient instruments and approaches for drought mitigation and flood control.

OTHER ECONOMIC USES OF WATER

Afghanistan's present **priorities** for water use focuses on **domestic water, irrigation and industrial water and hydropower**, especially considering the challenges in these three sub-sectors over the 10-15 years. While MIWRE believes that prioritisation approaches must be based on the most **urgent needs** of the communities, it also believes the appropriate use of water in other economic sub-sectors should not be completely ignored. The use of water should be strategised in a manner that can effectively contribute to the national economic growth, by providing additional **employment** and earning additional **income**, while improving the **quality of life** at the same time through appreciation of tourism and recreational opportunities, as well as aquaculture, industrial water uses and transportation. However, **strategies** for these and other economic uses must be **compatible** with existing water needs and uses and future demands and should be sustainable and environmentally friendly.

While a more detailed strategy will be required to fully address opportunities and areas of water use in other economic sub-sectors fully, the present strategy outlines a few essential actions for immediate needs to be addressed. These are:

- Promote and encourage water-based **recreational and eco-tourism** activities;
- Promote and support bottling and already identified **natural springs** for both the domestic use and for export;
- Develop productive uses for **floodplains**;
- Promote the development and enhancement of **fisheries and aquaculture**;
- Promote efficient **industrial water** uses based on sound environmental standards and norms, including recycling, processing and treatment of wastewater; and
- Establish specific **regulations for zoning** and development that will build confidence for **private sector investment** in these areas.

CONCLUSIONS

The strategic objectives in this policy framework are a statement of Afghanistan's short- and medium-term needs and will be expanded as the country progresses in the reconstruction, rehabilitation, and early development processes.
MIWRE believes **strategies must be flexible**, especially as the country is going through a transitional period. Strategies - and to a certain degree policies - should be subject to change as the situation evolves and regular change occurs both within the country and in relation to its international development partners. Present and future policies and strategies should, therefore be responsive to local and national needs, and the country's needs in dealing with its neighbouring countries.

Similarly, this document outlines a brief description of major strategic interventions that MIWRE will undertake in the short- and medium-term, and will require a series of **sub-sector policies and strategies**, as well as technical papers and regulations to address each strategic objective separately.

Successful achievement of the above strategic objectives will depend on the development of enhanced **information systems**, as well as on appropriate **legislation** and a functioning **legal framework**. To ensure the success of the strategies, MIWRE will address the following issues as a pre-requisite:

- **In relation to water-related information systems:** development of a functioning information collection, analysis and dissemination mechanism; establishment of a functioning hydro-meteorological network; establishment of basin-wide water accounting systems; and integration of the water resource database with environmental database.
- **In relation to legal frameworks and legislation:** preparation of a comprehensive national water policy and development and/or amendment of existing water resource acts; harmonise and amend existing laws and regulations that might be conflicting with national policies and interests and development processes; incorporate legislative provisions for groundwater use and management; establish procedures to enforce established acts and regulations; and establish equitable and functioning water rights and ownership.
- **In relation to regional cooperation for mutual benefits:** appraise and understand the water needs of the neighbouring countries; pursue confidence-building measures with neighbouring countries (and implement mutually beneficial development programmes).
- **In relation to potable water supply, sanitation, and hygiene awareness:** enhance institutional capacity for coordination, planning, implementation, management and monitoring of all stakeholders; regulate and enforce standards and regulatory mechanisms for water quality and waste discharge; facilitate and contribute to equitable water and sanitation programmes for both rural and urban areas;
- adopt **effective conservation and protection measures** both for water resources and for the environment; and establish and develop an **effective coordination mechanism** with relevant public authorities, the private sector and other stakeholders, at national, provincial, and local levels.

SUMMARY OF THE 12-YEAR STRATEGIC PLAN FOR THE WATER SECTOR

During 1381 and 1382 (2002 and 2003), the Transitional Islamic State of Afghanistan has promoted the development of National Development Budgets. This initiative was followed at the end of 1382 (December 2003) to develop a 12-year strategic plan for Afghanistan under the title "Securing Afghanistan's Future", known as the "Recosting Exercise" within the government institutions and international community in Afghanistan.

MIWRE, together with MAAH, developed a 12-year strategic plan for the Natural Resource Management (NRM), along ten sub-programmes. Following is a list of the sub-programmes for the Ministry of Irrigation, Water Resources and Environment (MIWRE):

1. **Institutional Strengthening and Capacity Building:** aims to establish an effective and efficient water resources and environmental agency with sufficient capacities to be able to respond to both the immediate reconstruction and longer-term development needs of the country at national, regional and local levels. Enhancing institutional, managerial, and technical capacities of MIWRE at all levels in policy development, planning national water development, environmental management and monitoring and evaluation, as well as managing natural resources on a river basin or watershed basis.
2. **National River Basin Management Programme:** aims to establish decentralised integrated water resources management, based on river basin and watersheds approaches, including the generation of adequate data for planning and operational needs of water management and promotion of water conservation and harvesting.
3. **National Emergency Irrigation Schemes rehabilitation Programme:** aims to raise overall system efficiency in the existing schemes to increase the size of irrigated land through the extension of existing schemes and the construction of new irrigation schemes. It further aims to establish sustainable use of water through efficient operational maintenance systems that should lead to improved productivity and increased production in the agriculture sector.
4. **National Long-term Irrigation and Power Programme:** aims to rehabilitate all remaining plans in the existing informal and formal irrigation schemes, leading to a substantial newly irrigated land and the supply of power from small-scale hydropower plants for local consumption.
5. **Environment Preservation and Regeneration:** aims to protect and rehabilitate areas that are environmentally sensitive, either because they are highly degraded, contain systems of features that are ecologically sensitive in nature or are subject to significant pressure as a result of human activities within the area in question. The programme aims to generate employment in conjunction with community involvement in environmental management, particularly in protected areas. Furthermore, preservation of the genetic diversity of Afghanistan's biological resources, introduction of environmentally sound and sustainable best practices, promotion and development of a viable private sector and the development of alternative energy to reduce the pressure on the natural resources, especially forests, are among other objectives.