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**MINISTERIAL FORUM ON WATER
Muscat, Sultanate of Oman
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**SOUTH-SOUTH COOPERATION IN THE WATER SECTOR:
BACKGROUND DOCUMENT WITHIN THE PURVIEW OF FAO**

(Background document prepared by the FAO Secretariat)

**OFFICE OF THE CHAIRMAN OF THE GROUP OF 77
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G-77 Ministerial Forum on Water

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1. Irrigation, Food Security and Poverty

There is a strong and complex relationship between food security, poverty and water resources. Millions of people are chronically undernourished and face food emergencies caused by natural and man-made disasters. About 20 percent of all cropland is irrigated and provides 40 percent of the world's food. Irrigated agriculture uses 70 percent of the world's freshwater and up to 95 percent in developing countries but more water will be utilized for irrigation in the future. The main challenge for irrigated agriculture is to contribute to the world's food production and improve food security.

In Latin America, less than 2 percent of the renewable water resources are withdrawn while in the Near East and North Africa, the water withdrawn for agriculture exceeds 50 percent of the renewable water resources. In sub-Saharan Africa, only 4 percent of cropland is irrigated, even though parts of the region have largely unexploited surface water and groundwater (FAO, 2005). FAO estimates that the world's growing population will require about 50 percent more food by 2030 compared to 1998. In the last 30 years, food production has increased by more than 100 percent. Over the next 30 years, 70 percent of gains in cereal production are expected to come from irrigated land. Moreover, estimates show that irrigated land in developing countries will increase by 34 percent by 2030, but the amount of water used by agriculture will increase by only 14 percent, thanks to improved irrigation practices.

Irrigation has increased food outputs and allowed for diversification into higher value crops, through the utilization of technologies aimed at increasing yield, and the provision of employment for the landless poor. Low-cost water and labour-saving irrigation technologies should be emphasized to assist smallholder agriculture in developing countries enhancing food security and ensuring a better livelihood to the poor farmers. Special efforts are necessary to ensure the equitable and fair access to water and other resources for improving food security at household and community levels.

In many developing countries, the direct beneficiaries and the main actors in food production and food security are still not sufficiently involved in the planning and implementation of irrigation schemes and projects. The poorest and most vulnerable rural people, mainly women, often do not have access to training and extension activities.

As part of its contribution to meeting the first UN Millennium Development Goal of eradicating extreme poverty and hunger by 2015, FAO is placing increased emphasis on the provision of water for food security, and has identified three basic concerns: to produce more food with less water; to protect water quality and the environment, including human health; and to close the food consumption requirement and production gap. FAO assists the Governments of its country members in implementing pilot-scale Special Programmes for Food Security (SPFS) and developing National programmes (NPFS). These programmes aim at empowering poor and food insecure rural (and urban) dwellers, so that they can improve their livelihood through access to knowledge and better nutrition, intensification and diversification of production systems, and connection to markets. SPFS/NPFS put special emphasis on the improvement of on-farm water control.

2. The South-South cooperation initiative

The FAO South-South Cooperation (SSC) initiative was launched in 1996 within the framework of the Special Programme for Food Security. Its principal objective is to promote solidarity among the developing countries and to allow the recipient countries to benefit from the relevant experience and expertise of more advanced developing countries in the area of food production. The initiative is intended to encourage the provision of technical assistance from more advanced developing countries to specific recipient countries participating in the SPFS and NPFS programmes. The South-South Cooperation initiative seeks to address these shortcomings by combining the FAO, bilateral and multi-lateral support to the developing countries participating in the SPFS and NPFS programmes.

Under the South-South scheme, technical assistance is provided by a team that works directly with farmers in the rural communities involved in the SPFS/NPFS. The duration of assignment for the mission is approximately two to three years. It is anticipated that the team will introduce the improved practices of sustainable and replicable agricultural development. In parallel, the team serves as a stimulus for constructive changes within the communities to which they are assigned. Notably, the South-South Cooperation shares some similarities in its rationale with the Technical Cooperation among Developing Countries (TCDC). Yet, it is important to accentuate the differences between the two schemes. The South-South Cooperation programme aims at fielding a significant number of experts (up to approximately

one hundred) in order to create a critical mass, and thereby maximizing its impact. By contrast, the TCDC experts are assigned in small numbers on consulting assignments of a short duration.

Up to December 2008, 40 agreements had been signed - the most recent was in October 2008, between Nigeria and China, as a second phase programme within the overall framework of the NPFS. By end-2008, over 1400 experts and technicians had worked in the field, on SPFS, NPFS and RPFSS projects. FAO is committed, today, to making SSC a key component of its NPFS activities. In 2006, FAO entered into a strategic alliance with the Government of China to deploy an additional 3 000 SSC experts and technicians to national and regional food security programmes. A similar arrangement is under negotiation with the Government of India.

The water control component, which aims at optimizing the use of scarce water resources, had been incorporated into most SPFS, and is a component of all NPFS and SSC programmes. Demonstrations that included improved low-cost water irrigation and management techniques have had the best results in terms of yields and stability of production, incorporation of high value food and cash crops, cropping intensification, farm incomes and food security. This has been the case, for example, in Bolivia, Burkina Faso, Cambodia, China, Ecuador, Guinea, Guatemala, Haiti, Mongolia, Nepal, Niger, Senegal and Tanzania.

3. South-South Cooperation activities for water development

3.1. *The FAO activities in Malawi*

FAO works with the Government of Malawi and non-governmental organizations to develop projects and policies targeting households which are most at risk, such as farmers with limited land, malnourished children and HIV and AIDS affected households. FAO programmes focus on capacity building. Depending on the needs of a particular area or population, activities could include healing the soil, maximizing use of water, providing seed, crop and garden diversification, and livestock production.

FAO is working with partners to increase technical knowledge on maximizing the use of all water sources. Partners improve their knowledge and skills for overall water management and are trying different settings. A strong focus is given to simple techniques for water harvesting and irrigation within the framework of the Special Programme for Food Security. One of the uniqueness about this programme is the use technical expertise from developing countries as part of building local skills in water management. FAO supported the attendance of 18 Malawians of a three-month irrigation technician training in Zimbabwe.

3.2. *The Cooperation between China and Nigeria*

Following the World Food Summit, held in Rome in 1996, the Government of Nigeria, being a Low Income Food Deficit Country (LIFDC), the Government of China and FAO, established a South-South cooperation agreement which involved the fielding of 500 Chinese experts and technicians over a period of four years and requested FAO's assistance to participate in the National Special Programme for Food Security (NPFS). As a follow-up to the first phase of SSC with China, Nigeria signed a second SSC Agreement with China and FAO in October 2008 for the fielding of 190 experts and technicians.

The South-South technical assistance programme directly complemented ongoing development efforts in critical areas where expertise was considered a constraint. Discussions with Government and other stakeholders identified several critical areas in need of such support, namely: smallholder irrigation; soil and water conservation, crop intensification, in particular horticultural production and marketing; livestock (including poultry) production and nutrition; and aquaculture. One of the advantages of using experts and technicians from China is that they were well versed in labour intensive community level activities, including the introduction of innovative low-cost small-scale technologies, and they were well familiar with farmers' needs and accompanied the transfer of numerous technologies in all fields of agriculture.

The South-South Cooperation in support of the SPFS included the following key activities:

- a. assist in the development of viable small-scale irrigation and water management systems for agriculture through the introduction of simple water control techniques and conservation practices, effective use of surface water and, where environmentally appropriate, the use of groundwater resources;
- b. increase efficiency in the production of food and horticultural crops through transfer of sustainable technologies; and
- c. encourage diversification of farming systems to increase agricultural production and incomes.

The second phase of Sino-Nigerian SSC, signed in October 2008, will be operating as fo February 2009 with the fielding of the first 5 Chinese experts to Nigeria, with the following expertise:

- Irrigation engineers
- Agro-industry specialist (for rice processing)
- Fisheries specialist (for hatcheries)

3.3. *Africa-ASEAN Cooperation*

Intra-African Training and Dissemination of Technical know-how for Sustainable Agriculture and Rural Development with Africa-ASEAN Country Cooperation within the Framework of South-South Cooperation (GCP/INT/053/JPN).

Time frame: 2007-2011

US\$ 4 357 025

Trust Fund/FAO-Government Cooperative Programme (TF/GCP)

Also Indonesia, Philippines, Uganda

3.4. *The Gender and Water initiative*

In 2002 the Government of Italy decided to fund an International project on “Gender analysis in farmers’ water management”. The project responded to the urgent need of the national teams working in FAO’s Special Programme for Food Security for training in gender and participatory tools to more actively involve the different socio-economic groups in the irrigation schemes, and assist both technical experts and farmers in irrigation planning.

The training workshops were organized in collaboration with the FAO South-South Cooperation Programme, promoting the exchange of experience among developing countries; and the FAO Project on “Empowerment of women in irrigation and water resources management for improved household food security, nutrition and health” (Cambodia, Nepal and Zambia), funded by the UN Fund for International Partnership Programme.

The development objective of the project was to enhance the opportunities for rural women to improve household food security and raise income, by introducing low-cost and water-saving technologies for irrigated crop production. The immediate objective was to introduce, within the SPFS framework, a participatory training and extension programme to increase its impact by ensuring women’s involvement in the mainstream activities and facilitate their access to productive resources and appropriate irrigation technologies.

3.5. *Papua New Guinea*

In 2004 the Government of Papua New Guinea, the Government of the Philippines and FAO signed a South-South Cooperation agreement. This two-year programme was designed to complement the efforts of a pilot SPFS conducted from 1996 to 2000 in two districts of the Morobe province (Markham and Huon) as part of FAO’s global approach towards food security.

The main objective of the project was to provide technical assistance to strengthen the implementation of water control systems and crop intensification, livestock and aquaculture development and post harvest processing. Five technology demonstration sites were established by the experts sent by the Government of the Philippines, focusing on the development of low-cost water control structures and crop intensification, benefiting 153 households. Rural development officers received training on soil and water sampling, while farmers were involved in field demonstrations on the practices to be followed to improve and sustain productivity. Diversion dams were constructed in three villages and irrigated rice production and improved cultural management practices in field crops and horticultural crop were introduced.

3.6. The Sirte Conference on Water for Agriculture and Energy and its follow-up

The Ministerial Conference on “Water for Agriculture and Energy: the Challenges of Climate Change” held in Sirte from 15 to 17 December 2008 recovered a fundamental role to strengthen the existing partnership agreements and foster the creation of new North-South and South-South cooperation possibilities.

In order to reach the targets set by the Millennium Development Goals, energy and environment, their close inter-linkages, and their impacts on the availability of water resource have to be considered as essential for sustainable development as well as poverty reduction efforts. The main objective of the Conference was, therefore, to examine investment needs and management problems for the harnessing of water and irrigation at village level, for the rehabilitation of large-scale hydro-agricultural works and for the development. The focus has been put on concrete programmes and the assessment of their financing.

Driven by the concerns emerging from the steady decline in international funding for agricultural development, and from the urgent need to mobilize additional resources for an expansion of investment in water development projects, the participants in the Conference acknowledged the need and opportunity to expand programmes of South-South Cooperation in support of water development for food security and poverty reduction, through both bilateral and triangular arrangements.

In response to the challenges and needs of the African Continent, therefore, the establishment of a “Programme Partnership for Africa on Water for Agriculture and Energy” was regarded as a priority for the international community to consider. This partnership needs to be reconciled with the one adopted by the Tunis-2008 Initiative for Agricultural Water in Africa (AgWA).

The follow-up process of the Conference will focus on a solid partnership building component. The Sirte Conference offered a perfect platform for dialogue amongst all stakeholders and for promoting discussion between decision makers (donor community, governments, private sector and non-governmental organizations), taking into consideration previous commitments. Taking the move/momentum from this successful experience, the follow-up process will strengthen the dialogue and channel it towards the adoption of Partnership agreements which could give a strong contribution to capacity building in Africa in the formulation and management of projects related to water for agriculture and energy.

These North-South and South-South partnerships will contribute to the achievement of an overall strategy for Africa which would allow the continent to minimize the negative impacts of energy use and capitalize on opportunities for low-carbon growth and poverty alleviation, including multipurpose water storage infrastructure, rural biomass for land rehabilitation, bio-energy and carbon sequestration, irrigation, sustainable forest management, and carbon market development.

3.7. *UN-Water*

FAO is currently acting as the Chair of UN-Water, an interagency mechanism with 26 United Nations agencies, programmes and conventions engaged in work related to water and sanitation. Its goals are to provide an efficient, coherent and proactive mechanism for coordinating the work of the UN system in these areas and thereby contribute substantially to the achievement of global water- and sanitation-related targets and goals.

UN-Water complements and adds value to existing UN focus areas and activities by facilitating synergies and joint initiatives among implementing agencies. In doing so, UN-Water seeks to promote increased coherence in UN system actions at all levels, and in particular at the country level. Although UN-water is not directly involved in South-South Cooperation, it has initiated Task Forces which are focusing on such aspects. These include a Task Force on Country Level Coordination and a Task Force on Indicators, Monitoring and Reporting. Activities of UN-Water are funded partly through a Multi Donor Trust Fund which is administered by FAO.

3.8. The Asia Pacific Water Forum

The Asia-Pacific Water Forum's creation been called for by the region's ministers at the 4th World Water Forum and was launched in Manila in September 2006. It has since been active in providing countries and organizations in the region with a common platform and voice to accelerate the process of effective integration of water resource management into the socio-economic development process of Asia and the Pacific, sustaining efforts in bringing water issues to a higher priority level, based on

concerted, concrete actions. Several key events have provided occasion to rally key stakeholders from across the region, namely, the 1st Asia-Pacific Water Summit, which was held in Japan, in 2007.

Key organizations of the APWF are: Asian Development Bank (ADB), the International Center for Water Hazard and Risk Management (ICHARM), the World Conservation Union (IUCN), FAO, PUB Singapore, United Nations Educational, Scientific and Cultural Organization (UNESCO), Streams of Knowledge (STREAMS), United Nations Human Settlements Programme (UN-HABITAT), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Asia-Pacific Broadcasting Union (ABU), Asia Society, International Center for Water Hazard and Risk Management (ICIMOD), International Water Management Institute (IWMI), Interstate Commission for Water Coordination of Central Asia (ICWC), Interstate Commission for Sustainable Development (ICSD), Japan International Cooperation Agency (JICA), National Science Museum of Thailand, Network of Asian River Basin Organization (NARBO), United Nations Department of Economic and Social Affairs (UNDESA), United Nations Global Compact, Water Web Alliance and Japan Water Forum (JWF).

Sub-regional activities are coordinated by: the Executive Committee of the International Fund for Saving Aral Sea (EC IFAS), Global Water Partnership of Caucasus and Central Asia (GWP CACENA), Korea Water Forum (KWF), Bangladesh Water Partnership (BWP), Global Water Partnership Southeast Asia (GWP SEA) and Pacific Islands Applied Geoscience Commission (SOPAC).

FAO, together with IUCN, is the Lead Organization of APWF for Water for development and Ecosystems, which addresses issues and policy recommendations related to food security and natural resources management.

At the 1st Asia Pacific Water summit, FAO and IWMI launched the **FAO-IWMI Regional Initiative on Re-inventing irrigation and agricultural water governance in the Asia Pacific to meet the Millennium Development Goals, A regional programme to support action at all levels through knowledge sharing, capacity building and implementation. A regional programme to support action at all levels through knowledge sharing, capacity building and implementation.** This initiative has 5 components:

1. **Development of communities of practice** for policy makers, implementing agencies, water resources and irrigation system managers, water user and farmer organizations
2. **A knowledge hub for a knowledge network** on irrigation and groundwater governance
3. **Supporting action in representative basins and their groundwater systems:** support to **7 basin centres** of excellence/reference, to functional centres of excellence /reference within these basins

4. **Development and adoption of regional guidelines for monitoring investment and results** including a harmonized regional irrigation benchmarking system
5. **Mobilization of the professional community in the region** for analysis, advocacy, dissemination and promotion of national initiatives

Action is being initiated at regional level and in 4 river basins in the following countries: Thailand, China, Malaysia and Viet Nam, focusing on water allocations issues, thanks to project GCP/RAS/241/JPN: Study on analysis of sustainable Water Resources Use:

Time frame: 2008-2011

US\$ 884 818

The second component of the Initiative is also now operation, with the Launching in Bangkok on 19 January of the IWMI-FAO Knowledge Hub on Irrigation services Reform, which focuses on knowledge synthesis and capacity building on the modernization of irrigation systems in the region.

4. Sources

AQUASTAT - FAO's Information System on Water and Agriculture.

<http://www.fao.org/nr/water/aquastat/main/index.stm>

FAO, Special Programme on Food Security.

<http://www.fao.org/spfs/south-south-spfs/ssc-spfs/en/>

FAO, Representation in Viet Nam.

<http://www.fao.org.vn/en-US/Home/southsouth.aspx>

FAO, Representation in Malawi.

<http://www.unmalawi.org/agencies/fao.html>

Report of the High-Level Conference on South-South Cooperation, Marrakech, 18 December 2003.

<http://www.g77.org/marrakech/RT-Food.htm>

South-South Cooperation and TCDC Programmes in FAO, Similarities and differences. FAO Internal; Paper, November 2001.

Strengthening South-South Cooperation in Support of National and Regional Programmes for Food Security. FAO Internal Paper, December 2005.

IWMI-FAO Knowledge Hub on Irrigation Services Refrom:

<http://www.waterknowledgehub.iwmi.org>

Asia Pacific Water Forum:

www.apwf.org

<http://www.sirtewaterandenergy.org>