



AMERICAN MODEL UNITED NATIONS

ESCWA

ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA

Report to the The Economic and Social Council Sustainable Development Productivity: Water Resources

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EXECUTIVE SUMMARY

1 At its 48th session, held on 20 November to 23 November 2010, the Economic
2 and Social Commission of Western Asia (ESCWA) mandated Water Resources as a
3 priority theme for the 2010-2011 review cycle by considering relevant United Nations
4 plans and programs of action pertaining to the situation in Western Asia to advise future
5 actions to be taken in this topic area.

6 On this theme the body held collaborative sessions elaborating on four key water
7 resource issues and passed Draft Resolution 1. The four priority areas addressed were
8 water pricing policies, increasing water efficiency in urban and rural areas, desalination
9 techniques and research, and trans-boundary water issues.

10 ESCWA Member States are currently using water resources within the region at
11 unsustainable rates. The problem of water scarcity is compounded by population growth
12 rates that exceed global averages. It is imperative that this body takes action in order to
13 ensure there are sufficient water resources available to satisfy the needs of future
14 generations.

15 Countries may confront the issue of water scarcity in the region by adopting
16 measures to expand capacity. The historical practice of groundwater expansion in
17 Member States has led to rapidly falling levels of groundwater and the exhaustion of
18 aquifers in the region. Noting this, the ESCWA encourages water capacity expansion via
19 other means. Namely, desalination of seawater has been discussed as a potential means of
20 expanding water capacity. However, it must be noted that there are still significant
21 obstacles to desalinating water in an environmentally sustainable manner. Member states
22 may also elect to address the sustainable development of water resources through
23 measures designed to increase water use efficiency. Increasing efficiency is often more
24 cost-effective than means of expanding capacity.

25 ESCWA Member States are greatly committed to meeting the challenges and
26 demands of water scarcity in the region and will continue to attack these issues in the
27 context of sustainable and equitable use of water in the region.
28

CHAPTER I

A. DRAFT RESOLUTION FOR ADOPTION BY THE ECONOMIC AND SOCIAL COUNCIL

SUBJECT OF RESOLUTION: Sustainable Development and Productivity: Water Resources

SUBMITTED TO: The Economic and Social Commission for Western Asia

SPONSORS: Jordan, Sudan

The Economic and Social Council

- 29 *Realizing* that access to water is a fundamental human right,
30
31 *Recognizing* that water scarcity is a growing issue affecting Member States of the
32 Economic and Social Commission for Western Asia (ESCWA),
33
34 *Recalling* the commitments outlined by the Convention on the Law of the Non-
35 Navigational Uses of International Watercourses 1997,
36
37 *Deeply concerned* about the negative effects damming has on the quality and availability
38 of already scarce water resources to all watercourse states,
39
40 1. *Encourages* all Member States of the ESCWA that have not already signed onto or
41 ratified the Convention on the Law of the Non-Navigational Uses of International
42 Watercourses 1997 to consider making further strides towards adoption;
43
44 2. *Recommends* multilateral dialogues among watercourse states to coordinate and share
45 impact analysis of future projects along the watercourse;
46
47 3. *Further recommends* states to implement early warning systems in order to recognize
48 and prevent occurrence of drought, including:
49 (a) Comprehensive network of geographic information systems;
50 (b) Sharing of all climate data between ESCWA Member States to better coordinate
51 efforts;
52
53 4. *Urges* cooperation between states to facilitate communication with each other in times
54 of crisis;
55
56 5. *Encourages* riparian states to consider alternative waste management procedures;
57
58 6. *Urges* states to consider multilateral trade agreements to compensate for negative
59 effects of upstream waterway developments to riparian states:

- 60 (a) Limit the pollution of water resources;
- 61 (b) To ensure consistency and water availability.

Passed by consensus, with 0 abstentions

63 **CHAPTER II**

64 **A. INCREASING EFFICIENCY IN RURAL AND URBAN SETTINGS**

65

66 Throughout the ESCWA, water resources are often managed in an unsustainable
67 manner, jeopardizing the livelihoods of many individuals. These unsustainable practices
68 are hazardous to the health of rural and urban residents, and continues to promote conflict
69 in the region. To reconcile these challenges it is imperative for ESCWA Member States to
70 advocate the adoption of sustainable water development policies.

71 It is necessary to approach water scarcity at both the rural and urban levels. The
72 ESCWA recognizes the problems of urban and rural societies as unique to one another
73 and must be dealt with independently. The ESCWA will discuss the concerns and issues
74 of rural communities first.

75 In rural areas, agriculture consumes the majority of water resources. Historically,
76 farmers in ESCWA Member States have generally watered their crops by means of flood
77 irrigation and through unregulated wells. During flood irrigation a large portion of the
78 water intended for irrigation never reaches the crops and is permanently lost as a result of
79 runoff and evaporation. The usage of unregulated wells undermines the governments'
80 capacity to monitor water levels, often resulting in inaccurate information. These
81 unsustainable traditional agricultural practices must no longer be implemented in the
82 region, and be replaced with internationally accepted irrigation practices.

83 Internationally accepted irrigation techniques will mitigate current unsustainable
84 practices. According to the World Bank Report Making the Most of Scarcity, these best
85 practices are often as simple as the use of flexible rubber tubing, valves, and timing
86 systems to ensure that water intended for irrigation actually makes it to the crops.
87 Implementing concentrated distribution schemes eliminates water loss caused by
88 evaporation and runoff. Relative to other mitigation tactics, concentrated distribution
89 schemes are a cost effective approach to saving water and are, therefore, highly
90 recommended. However, Member States continue to meet considerable challenges
91 throughout the implementation process. These challenges include: insufficient funds on
92 behalf of farmers, as well as a reluctance of farmers to abandon traditional agricultural
93 methods. The ESCWA recommends a variety of methods to achieve the implementation
94 of the aforementioned modern irrigation practices, including but not limited to, the
95 following measures:

- 96 1. Recommends the continuation of preexisting collaborative efforts on
97 behalf of non-governmental organizations (NGOs), international
98 organizations (IOs), and governmental agencies and ministries to assist in
99 implementing internationally accepted forms of irrigation. The ESCWA
100 continues to encourage information sharing between relevant development
101 agencies and government ministries when assisting in the implementation
102 of sustainable water policies.
- 103 2. Member States strongly encourage continued development of

104 comprehensive education initiatives. In general, systems of education in
105 rural areas are deficient and low level awareness in rural areas concerning
106 the importance of sustainable water management practices is often a
107 sizable barrier to the achievement of sustainable water policies. In order to
108 combat this lack of awareness and to promote the use of water in a
109 sustainable manner, this body suggests:

- 110 a. The construction and active use of model farms to promote
111 awareness and educate rural farmers on the increased benefits of
112 implementing sustainable water systems. These farms would serve
113 as rural education centers, providing farmers with access to
114 workshops and training seminars about sustainable farming
115 practices, specifically modern irrigation techniques.
 - 116 b. A campaign of public service announcements aiming to educate the
117 greater population on the importance and benefits of sustainable
118 water policies. This plan would entail the use of slogans, mottoes,
119 and catch-phrases, tested by market research firms for applicability
120 to multiple demographics.
 - 121 c. Member States and related organizations are encouraged to
122 continue the dissemination of information on the topic, through the
123 disbursement of educational materials to all relative stake holders.
- 124 3. To allow for greater availability of accepted irrigation practices, subsidies
125 are encouraged by the ESCWA Member States to further the
126 implementation of modern agricultural equipment. Subsidizing modern
127 irrigation technology will allow impoverished rural farms to afford the
128 purchase of modern technology. Subsidies would increase the availability
129 and attractiveness of purchasing water efficient equipment at a cost
130 effective price for impoverished farmers.

131
132 As stated previously, ESCWA Member States feel it is imperative to take action
133 to improve the efficiency of water distribution networks in urban areas. This necessitates
134 taking a multi-faceted approach when implementing mitigation tactics in urban areas. As
135 urban populations continue to grow in the ESCWA it is especially pressing that action be
136 taken soon to mitigate the effects of urban growth. Water distribution and waste
137 management systems must be improved, maintained, and in some areas constructed in
138 order to meet growing demand.

139 Inadequate infrastructure is a major issue affecting the consumption of water in
140 urban areas. Current water distribution networks and waste management systems are
141 often poorly planned and maintained, and in some circumstances non-existent. Poorly
142 maintained and improperly planned systems result in an unnecessary loss of sanitized
143 water. This is particularly inefficient if the state utilizes resources to clean the water that
144 is subsequently lost. It is imperative that governments and local water authorities take
145 initiatives to replace antiquated systems and put in place exhaustive maintenance
146 procedures. Furthermore, existing waste management systems must be updated and new
147 waste treatment facilities constructed in order to avoid the contamination of ground water
148 in densely populated urban areas.

149 Member States recognize that women are one of the major demographics affected

150 by this initiative as they hold the primary responsibility of water management on the
151 domestic level. Particularly in poverty-stricken settings, they are responsible for
152 acquiring water for cooking, sanitation and hygiene. This burden hinders their ability to
153 acquire education and contribute to the family income. Member States recommend the
154 expansion and continuation of educational initiatives directed at women in rural and
155 urban populations on how to better acquire and manage water resources, these initiatives
156 will contribute to the sustainable development of the ESCWA.

157

158 **B. PRICE CONTROL RECOMMENDATIONS**

159

160 Water pricing is an extremely turbulent issue within Arab states. General
161 consensus calls for universal access to affordable water resources. However, current
162 trends in water pricing are significantly lower than the true market value. The majority of
163 land in Member States is arid or semi-arid, this increases water scarcity and hinders the
164 efficient use of water. These geographic circumstances must be considered when adopting
165 long-term sustainable policies. The geographic constraints of Member States
166 compounded with the heavy subsidizing of water has led to unsustainable water policy in
167 the region. To alleviate these issues, the ESCWA recommends the introduction of price
168 controls at the state level.

169 Current water prices in Member States do not reflect the true economic,
170 environmental, and social costs affiliated with water consumption. Long-term heavy
171 usage of finite water resources has several negative effects, such as desertification of the
172 landscape, lowering of the water table, and the eradication of local ecosystems. As such,
173 the ESCWA moves to reform the price controls currently in place in a manner that will
174 better reflect the true market value while simultaneously ensuring the supply of water to
175 those in less fortunate economic situations.

176 The ESCWA recognizes water as a fundamental human right, and discourages any
177 negative effect water pricing has on economically disadvantaged populations. The
178 ESCWA promotes a progressive tax structure in which a basic daily unit of water is to be
179 determined by each individual state based on consumption rates within urban and rural
180 regions. All consumption above the basic daily unit will be termed as excessive
181 consumption, and will be priced at the market equilibrium rate. This action will largely be
182 conducted only in urban areas, seeing as how rural populations derive their water from
183 unregulated sources such as rivers, canals, and wells, making this policy unfeasible in
184 these regions. All Member States of the ESCWA are recommended to research the
185 benefits of water pricing mechanisms, but at no point are required to adhere to this policy
186 recommendation.

187

188 **C. DESALINATION PROGRAMS**

189

190 ESCWA Gulf states are global pioneers and leaders in desalination technology.
191 Kuwait for instance depends on this technology for eighty percent of all water resources.
192 Gulf countries understand that other alternatives shall be pursued, while concurrently
193 pursuing improvements in desalination technology to mitigate negative impacts of the
194 process.

195 Investment in desalination technology should be directed to lower the cost of the

196 process while reducing its environmental cost. Presently, such technology has been
197 developed independently by nations with available capital. Cooperation among these
198 countries has not been fully developed to address the economic and environmental
199 burdens of the desalination process. This makes efforts difficult to be expanded in the
200 region, especially to states that cannot afford the technology or that are landlocked.
201 However, there is potential for coalition building to meet these external challenges.

202 The representative of the International Panel of Climate Change (IPCC)
203 highlighted the dilemma faced by the countries in the region. As signatories of the Kyoto
204 Protocol, the IPCC recommends finding solutions to mitigate environmental impacts
205 caused by desalination programs. The representative from the IPCC reinforced the
206 necessity of considering the numerous impacts of expanding current desalination
207 programs. Environmental impacts include: the negative impact on marine organisms and
208 fishing industries, emissions caused by the use of fossil fuels during the process of
209 desalination, and the distribution of toxic salt brine waste created during desalination.

210 ESCWA Member States recognize the geographic constraints of landlocked
211 Member States. While the problem is recognized, consensus has not been reached on
212 possible suggestions or solutions, therefore, further discussion is strongly encouraged.
213 There are initiatives regarding the development of alternative energies in the desalination
214 process, such as solar energy. However, alternative energies are currently unable to meet
215 demand and are vulnerable to climatic problems in the region, and can only be done on a
216 small scale.

217 It is important to emphasize the promotion of desalination information sharing
218 between NGOs and Member States. One example is the International Desalination
219 Association affiliated with the United Nations. These initiatives can help create more cost
220 effective and environmentally friendly ways to interact with the desalination process.
221

D. Deliberations

222 The commission strongly supports the work of the Water Management Research
223 Institute located in Egypt, and further supports the International Center for Agricultural
224 Research in the Dry Areas located in the Syrian Arab Republic. The ESCWA also
225 recommends the development of further research institutions in order to expand capacity
226 and productivity in this critical research field. The ESCWA relies on these institutions to
227 expand mitigation tactics, and to disseminate their research to Member States in order to
228 further tackle water scarcity in the region.

229 Jordan, Sudan, Iraq, and Egypt met with permanent representatives from Turkey
230 and Israel to discuss trans-boundary issues. During the discussion both states, Turkey and
231 Israel, were made aware of the effect of their actions on ESCWA Member States.

232 Israel and Turkey were presented with the 1997 Convention on the Law of the
233 Non-navigational Uses of International Watercourse to discuss how their non-adoption
234 affects the region. Articles of great importance to Member States that were discussed as
235 being the most important to increasing the equitable use of trans-boundary watercourses
236 include: Article 5, equitable and reasonable utilization and participation; Article 7,
237 obligation not to cause significant harm; Article 8, general obligation to cooperate; Article
238 9, regular exchange of data and information; Article 20, protection and preservation of
239 ecosystems; Article 21, prevention reduction and control of pollution; and Article 23,

240 protection and preservation of the marine environment. After discussing the importance
241 of the adoption of this convention, Israel and Turkey both declined to adopt or sign on at
242 this time. Although it was obvious that Israel and Turkey are not going to follow ESCWA
243 Member States' recommendations, both states were not opposed to future conversations
244 on the issue.

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249 **CHAPTER III.**

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251 **ADOPTION OF DRAFT REPORT**

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253 On 23 November, 2010 the Economic and Social Commission for Western Asia
254 passed the report on Sustainable Development Productivity: Water Resources by
255 consensus.

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