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ENGLISH SUMMARY

This is a summary of the report entitled “A mechanism for consolidating regional cooperation: general guidelines for groundwater management in the ESCWA region within the scope of integrated water resources management” (in arabic). While this summary endeavours to highlight the salient issues covered in this report, a fuller description is available in Arabic in the main body of this study.

The percentage of groundwater as a natural renewable source varies among ESCWA members and can be divided into the following three groups: (a) Bahrain, Kuwait, Palestine and Qatar for which groundwater represents more than 75 per cent of renewable resources; (b) Jordan, Oman, Saudi Arabia and the United Arab Emirates whose groundwater represents 25-75 per cent of renewable resources; and (c) Egypt, Iraq, Lebanon and the Syrian Arab Republic where groundwater represents less than 25 per cent of renewable resources. ESCWA members can be further grouped in terms of groundwater as a percentage of total water consumption as follows: Egypt, Iraq, Lebanon and the Syrian Arab Republic where groundwater does not represent a significant portion of total consumption; and Bahrain, Jordan Kuwait, Oman, Palestine, Qatar, Saudi Arabia and the United Arab Emirates for which groundwater represents a significant portion of total consumption.

ESCWA resolution 233 (XXI) of 11 May 2001 urged members to “increase the level of their cooperation in the field of water resources and, in particular, with regard to shared groundwater, water-related legislation and the management of demand”.¹ Within that context, the two principal objectives of the guidelines are to highlight the prevailing water issues, particularly with regard to the overuse of aquifers; and to introduce and optimise suitable management tools that take into consideration hydrological conditions and issues of sustainability while promoting socio-economic development in the region. The guidelines reviewed in this study are aimed at enhancing the management of aquifer systems in the ESCWA region through the application of integrated water resources management (IWRM) concepts. With the stated objective of sustaining groundwater resources, these improvements focus on various key issues, including prevailing natural limitations, socio-economic constraints and legal or institutional controls.

There are a number of general rules and conditions with regard to preparing sound IWRM plans. Prominent among these are the following: (a) to prioritize consumption such that it matches public demand, including consumption by domestic animals; (b) to cater for other water needs, particularly in the areas of agriculture and industry; (c) to use non-renewable resources from aquifers only when absolutely vital; (d) to take all necessary measures in order to protect the resources from pollution by, inter alia, providing proper sanitation facilities, promoting recycled wastewater and monitoring all available freshwater resources; and (e) to evaluate and revise implementation programmes on a regular basis.

However, the main obstacles that limit the application of IWRM concepts in the region include the following: (a) lack of adequate financial resources; (b) unsustainable and injudicious use of water; (c) the degradation of the quality of water; (d) State support in the agricultural and other sectors at the expense of the water sector; (e) the absence of comprehensive national water plans and of integrated strategies; (f) outdated water legislations, where such legislations exist at all, and ineffective implementation tools; (g) weak managerial capabilities in water-related institutions and the lack of an effective institutional framework to coordinate water programmes; (h) inadequate and inaccurate water demand estimates and hydrological and geological data; (i) limited participation by the public due to both insufficient awareness and the limited capabilities of local communities in managing available water resources; and (j) limited regional cooperation between States, particularly with respect to shared rivers and aquifers.

There is therefore a need for ESCWA members to formulate sound and comprehensive groundwater policies with a focus on national water resources and in close coordination with all relevant stakeholders. Moreover, this collaboration must be flexible at both local and regional levels, thereby promoting swift and effective responses to prevailing issues and reaping the benefits from bilateral agreements on shared water

¹ E/ESCWA/21/10.

resources. ESCWA members can indicate that they remain seized on the matters of socio-economic development and the environmental value of groundwater by guaranteeing policy implementations through enhanced procedures and reforms, and by disseminating such information and data that increases public awareness. Additionally, such emphasis by the State increases the role of groundwater in regional development and, consequently, in regional stability, and stresses the strong relationship between socio-economic development that arises from a sustainable use of water and other important societal issues, including poverty, health and sanitation.

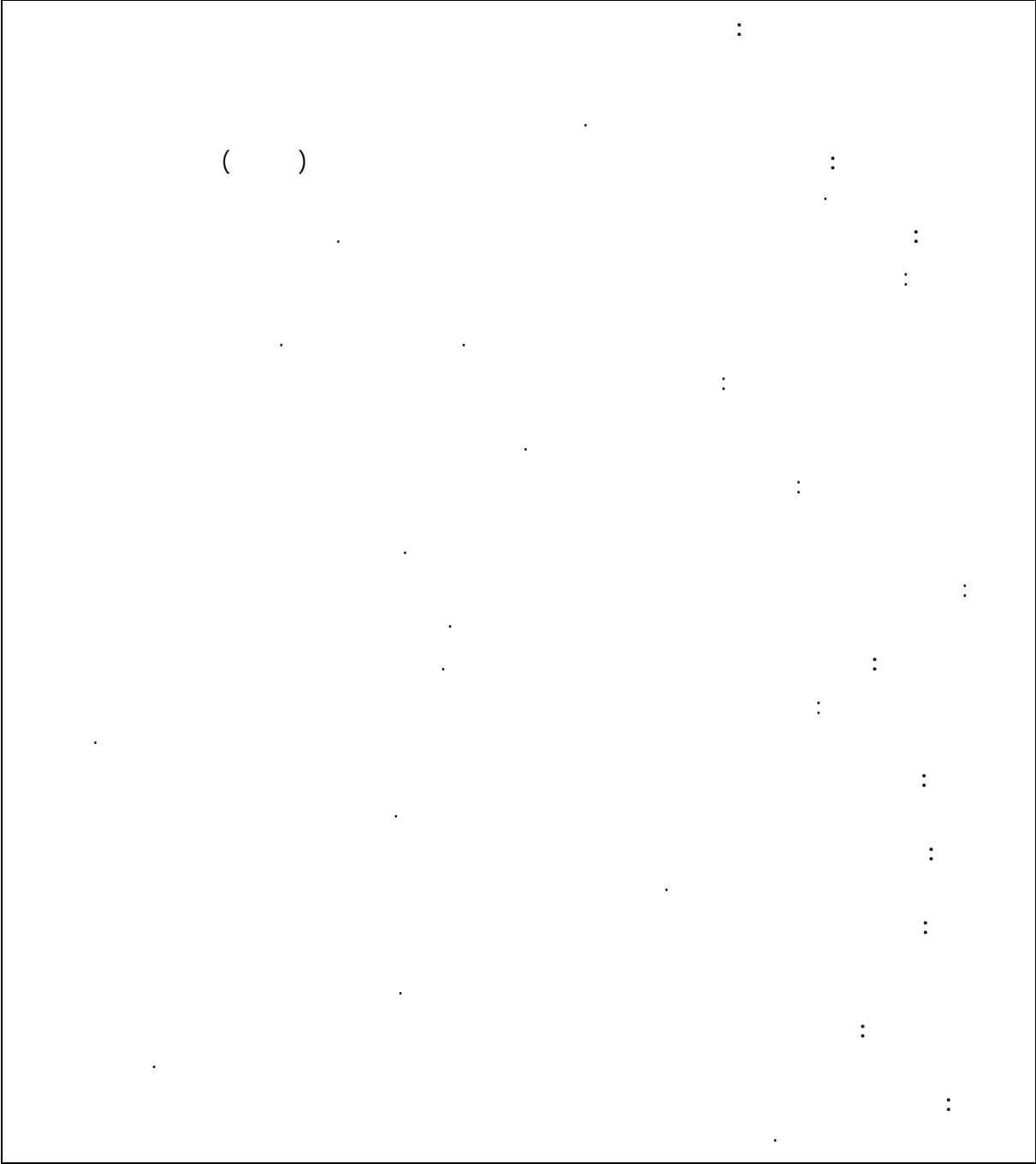
Furthermore, ESCWA members have a responsibility for investment policies that affect the water sector on three levels, namely, macroeconomic, including monetary, fiscal and trade policies, all of which affect the pace and type of development of the economy in general and of the water sector in particular; public investment in sectors that provide services, which have an impact on water demand; and public and private investment in the water sector itself given the capital-intensive nature of this sector with its significant financial needs in the areas of irrigation, water supply, wastewater treatment, protection from floods and environmental protection. Investments in the water sector can be encouraged by, inter alia, building simple and appropriate surface water structures, developing and improving wastewater recycling processes, providing modern technologies for desalination, enhancing research and development in hydro-meteorological sciences, and reassessing a number of the water importation projects.

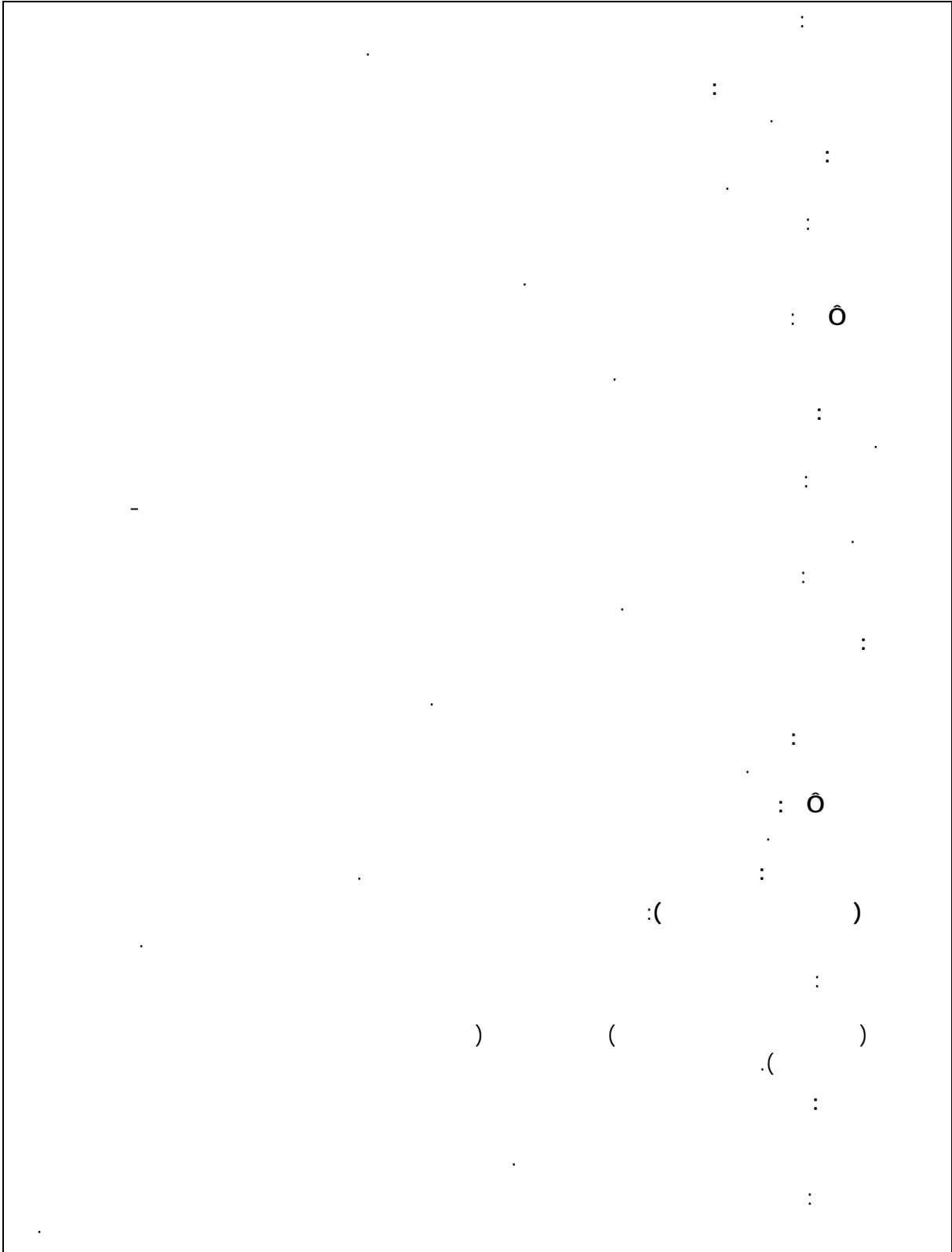
Within the context of socio-economic development, there is a need to integrate strategies on water resources with socio-economic policies. Moreover, the state of the national economy needs to be evaluated on a regular basis with an eye on allocating adequate funds to enhance capacity-building programmes, to motivate local staff and to draft strategies on water resources in accordance with prevailing needs and in order to reduce losses. Water issues need to be addressed in educational programmes by developing textbooks on such issues and using them with Internet support sites and CD-ROMs, developing educational laboratory tools and models around water and adding them to curricula, and using actual local projects as learning classrooms for lessons on water management.

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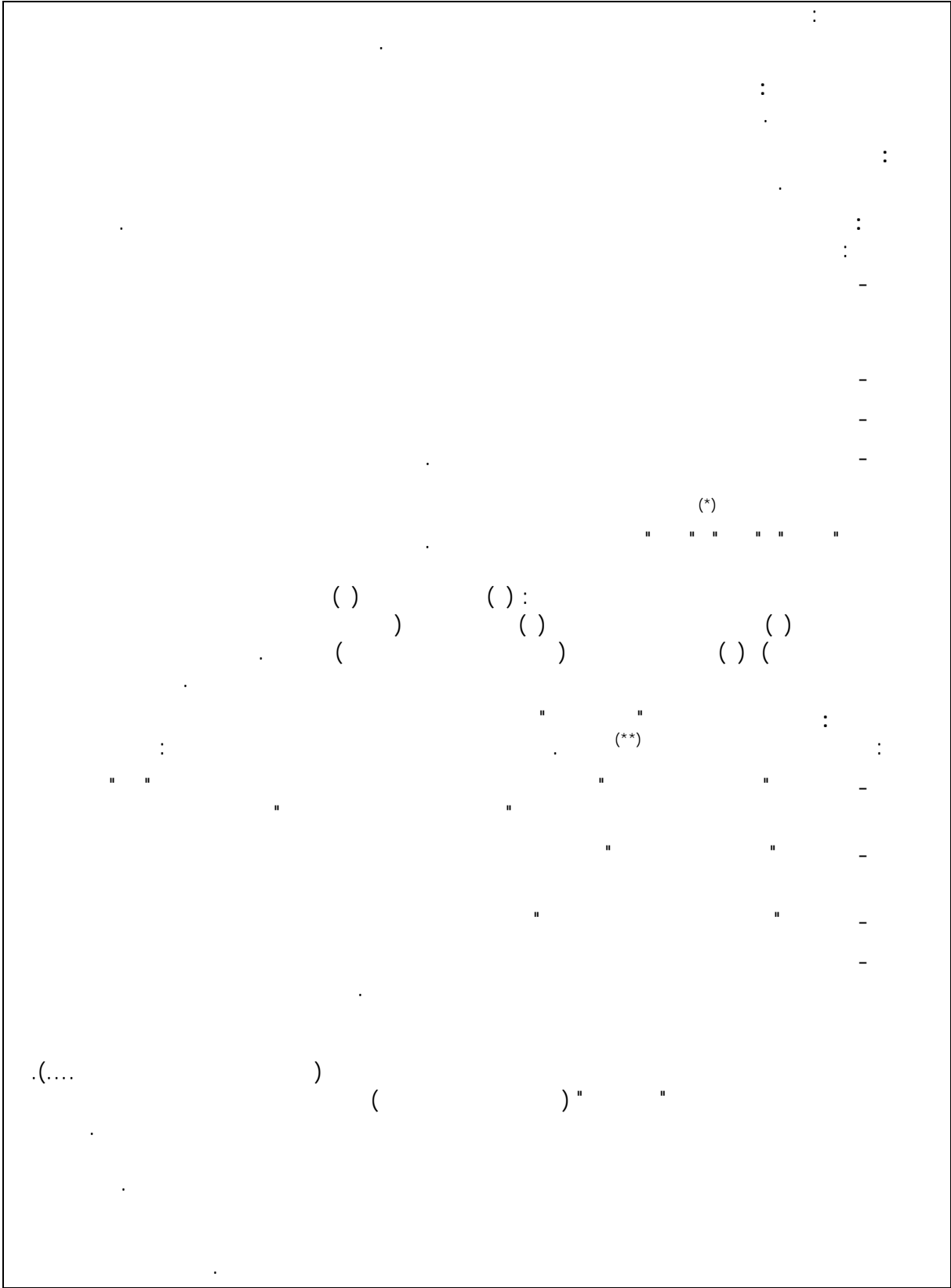
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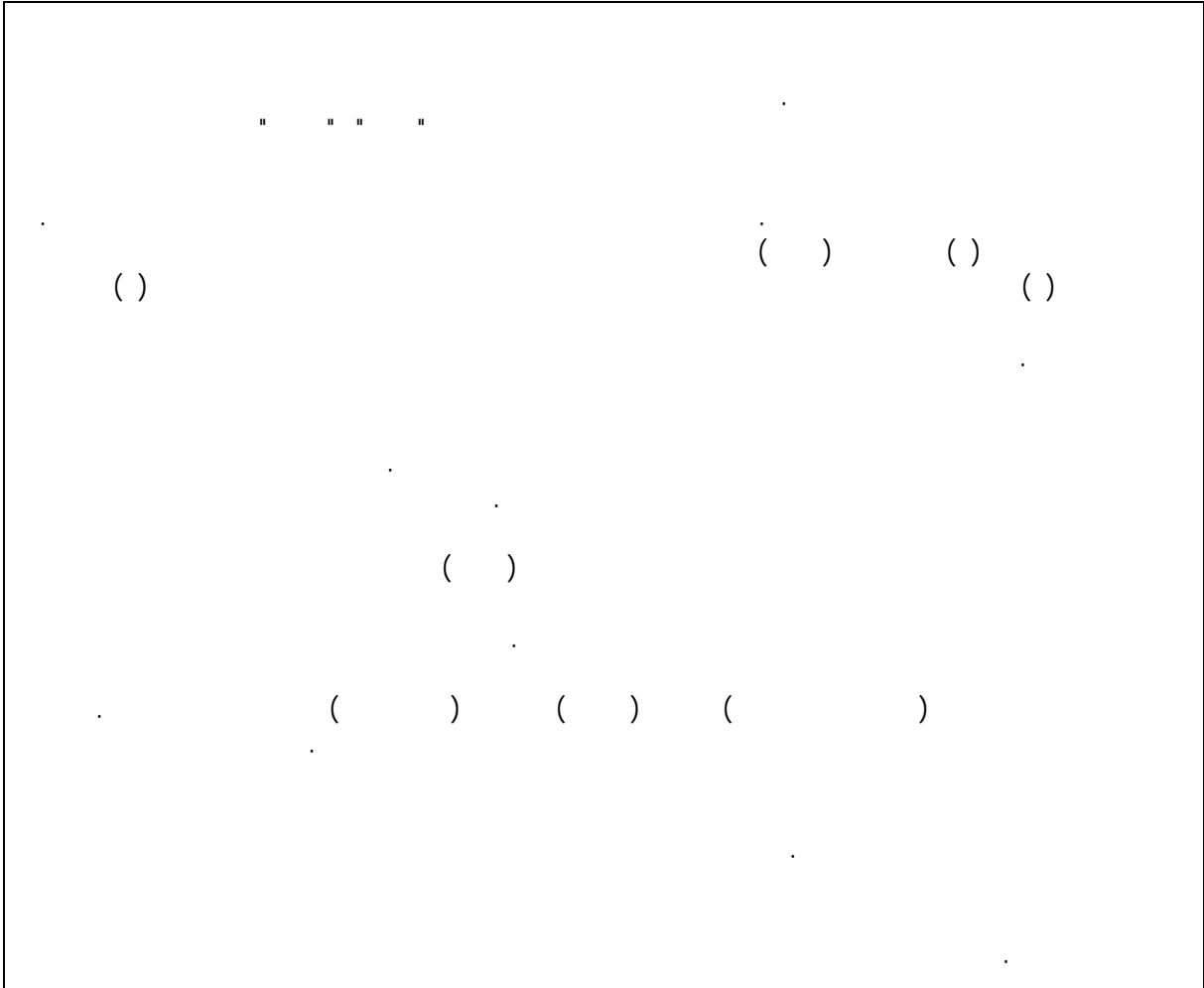
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