



在灌溉现代化研讨会上的致辞

Workshop on the Future of Irrigation Modernization

闫冠宇

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各位来宾，女士们、先生们：大家上午好！

Ladies and Gentlemen,

首先，我代表中国国家灌排委员会和中华人民共和国水利部农村水利司、代表王爱国主席（司长）对灌溉现代化研讨会的召开表示热烈的祝贺！对来自联合国粮农组织、世行、亚行、国际水管理学院等国际组织和来自印度、泰国、马来西亚、越南、印尼、尼泊尔、中亚五国以及中国国内的代表表示热烈的欢迎。

First, on behalf of CNCID and the Department of Irrigation, Drainage and Rural Water Supply of Ministry of Water Resources of PRC, I want to extend my sincere congratulations to the Workshop on the Future of Irrigation Modernization, and my heartfelt welcome to representatives from all around the world.

近年来，极端干旱和洪涝事件频繁发生，水资源短缺问题日趋严重，稳定和增加粮食生产面临越来越大的挑战，特别是世界金融危机发生以来世界粮食市场上粮食价格持续上涨，使得世界粮食安全问题更趋严峻。水与粮食安全问题已引起了国际社会的高度重视，在今后 25 至 30 年，随着世界人口的增长和城市化的发展，世界对粮食的需求量将会增加 70-80%。然而，增加粮食生产面临着巨大

的挑战，用于生产粮食的灌溉用水不会有太大的增长，耕地在减少和退化，特别是人均耕地在显著减少。增加粮食产量、解决粮食安全问题必须依靠提高单位用水量 and 单位耕地面积的生产效率，这就需要对已有灌区进行现代化的改造，提高灌区的生产能力和效率。因此，这次会议具有重要意义。

In recent years, the rising frequency of extreme weather such as drought and flood has added to the seriousness of water shortage, which has further imposed great challenge to the stabilization and growth of food production. And the problem has been worsened in the context of the international financial crisis. Water and food security have gained close attention from the international community. In the next 25 to 30 years, the demand for food will increase by 70-80% due to growing population and urbanization. However, the water used for irrigation will see little increase, and the arable land per capita will shrink significantly due to the loss and degradation of arable land on the whole. Therefore, the solution to the problem of food security lies in higher production efficiency which necessitates the modernization of irrigation area. Given this backdrop, this workshop is of vital importance.

中国是一个拥有 13 亿多人口的大国，立足国内解决好粮食安全问题，对保障中国和世界粮食安全也具有极为重要的意义。新中国成立后，国家投入了大量的人力、物力、财力发展农田水利事业。截至 2010 年底，中国已建成大中小型水库 8.72 万座，大中型泵站 5 万多处，大型灌区 400 多处，中型灌区 7000 多处，小型农田水利工程 2000 多万处。在这些水利工程的支持下，我国农田灌溉面积（不含林果草灌溉面积）达到 6000 多万公顷，居世界第一位。灌溉耕地生产了全国 75% 的粮食和 90% 以上的经济作物。中国之所以能够以占世界 6% 的淡水资源、9% 的耕地，解决了占世界 21% 人口的粮食问题，农田灌溉功不可没。

With a population of more than 1.3 billion, China can make great contribution to the world by solving its own food security problem. Since the foundation of the People's Republic of China, the government has made great effort to develop farmland water conservancy. By the end of 2010, China has built 87200 reservoirs of

various scales, more than 50000 large and medium pump stations, more than 400 large scale irrigation areas, more than 7000 medium-sized irrigation areas, and more than 20 million small farmland water conservancy projects. With the help of these projects, China, with more than 60 million hectares of irrigated area (excluding forestry, fruit production and grassland), ranks number one among all countries in the world. In China, irrigated farmland produces 75% of the country's food and 90% of cash crops. And thanks to farmland irrigation, China has managed to feed 21% of the world's population with 6% and 9% of the world's fresh water and arable land.

中国是一个水资源短缺的国家，人均水资源量只有 2100 立方米，仅为世界人均水平的 28%。在全国水资源利用量中，农田灌溉用水所占比重约为 61%。中国对农业节水工作给予了高度重视，提出要把节水灌溉作为一项革命性措施来抓。20 世纪 80 年代以来，在连续 30 多年灌溉用水总量保持零增长的情况下，到 2011 年底，全国有效灌溉面积增加了 1146 万公顷，粮食总产量增加了 2500 多亿公斤，农田灌溉水利用率由 30% 提高到 51%，单位面积亩均灌溉用水量由每公顷 7158 立方米下降到 5505 立方米，减少了近四分之一。特别是近 10 多年来，加大了在农田水利领域的投资，中国大力发展节水灌溉事业，加强灌区节水改造，这为 2004 年以来中国粮食生产实现了“九连增”作出了重大贡献。

Water shortage is a serious problem in China. Water resource per capita is only 2100 cubic meters, or 20% of the world average. Among all the water resources utilized in China, farmland irrigation covers 61%. Chinese government has attached great significance to water-saving agriculture and treated water-saving irrigation as a revolutionary measure. Since the late 1980s, the total volume of water used for irrigation has seen no increase, but by the end of 2011, effective irrigated area has increased by 1146 hectares, total grain output has risen by more than 250 billion kilos, and the water used for irrigation has decreased by a quarter from 7158 cubic meters per hectare to 5505 cubic meters per hectare. In the past decade, China's special focus on water-saving irrigation and water-saving rehabilitation of irrigation areas has made great contribution to the continuous growths of food production since 2004.

目前，中国也存在耕作规模小而分散，灌排设施老化，灌溉用水效率和效益低下等问题。因此，必须采取综合措施，对已有灌区进行现代化改造，提高农业灌溉用水效率和效益，这涵盖了从储水设施到田间灌溉用水管理的全过程。2011年初中国政府制定发布了加快水利发展和改革的政策，中国将进一步加大对灌排事业的投入，促进灌排事业的新发展。主要发展目标为，到2020年将基本完成大型灌区、重点中型灌区续建配套和节水改造，大力发展喷灌、微灌和管道输水灌溉等高效节水灌溉。到2020年，中国将再新增农田灌溉面积500万公顷以上，总灌溉面积达到6533万公顷以上。通过新建和对现有灌溉设施改造，再新增节水灌溉工程面积1200万公顷，灌溉水利用率将达到55%以上。目前，中国正在采取切实行动来落实有关政策，实现确定的发展目标。

Currently, China is facing problems such as small-scale and scattered farming, old irrigation facilities, and low efficiency of irrigation water use. Therefore, comprehensive measures must be taken to modernize irrigation areas for higher efficiency and benefits of agricultural irrigation water usage. Such modernization covers the whole process from water storage facility to field irrigation water management. In early 2011, Chinese government issued the policy of accelerating the development and reform of water conservancy. China will further increase investment in irrigation to achieve new development. Main goals for future development include the completion of the rehabilitation of large-scale and key medium-sized irrigation areas and the promotion of water-saving irrigation methods such as sprinkler irrigation, micro-irrigation and pipeline irrigation. By 2020, irrigated farmland will be increased by more than five million hectares. Farmland irrigated water-saving will be increased by twelve million hectares and the efficiency of irrigation water usage will exceed 55%. Currently, China is taking meaningful action to ensure the full implementation of relevant policies so that the goals can be reached.

实现保障粮食安全是个社会问题，在国家层面上必须要有解决粮食安全的政治意愿，要制定政策和发展规划，确定合理的发展目标，提供资金和技术支撑，

改革管理机构和管理体制并制定实施切实可行的行动计划。保障增加粮食产量须采取包括政策、技术、管理、投资等方面的综合措施，包括增加储水设施、合理开发利用地下水、开发利用劣质水、发展节水灌溉、降低灌溉设施成本、对灌溉管理体制和机制进行改革，以及增加对小型农户的支持。

To improve food security, a social problem, a country should have a political will at the state level, formulate policies and plans with proper goals, provide funding and technical support, reform administrative institutions and systems and draw up feasible action plans. To achieve growths of food production, a country has to adopt comprehensive measures combining policy, technology, management, and investment.

中国的灌排事业发展得到了世界许多国家和国际组织的关心和支持，我们对此表示衷心的感谢！我们也愿意与各国和有关国际组织加强技术和经验交流，分享我们取得的知识和经验，共同推动世界灌排事业的发展，为解决世界粮食安全问题做出更大贡献。

The development of irrigation in China has received care and support from many other countries and international organizations. To this we must express our sincere thanks. Meanwhile, we are more than willing to strengthen our exchanges of technology and experience with others so as to share knowledge and experience, to jointly promote the further development of irrigation in the world, and to make greater contribution to the world food security.

最后，预祝本次会议圆满成功！

At last, I wish the workshop a complete success!

谢谢大家！

And thank you all!