

## AGRICULTURE AND RURAL DEVELOPMENT 5 YEAR PLAN LOGFRAME: Irrigation and hydraulics

**Overall objective: Achieve high sustainable and equitable growth, improve social environment and living conditions for rural people, especially the poor, protect and sustain natural resources and environment.**

Objectives	Interventions	Implementation responsibility (Lead/supporting institution and/or program)	Indicators
<b>Goal 1. Increase contributions of agriculture and rural development to national economy</b>			<b>TO BE COMPLETED</b>
1.1. Pro-poor increase in production and incomes	<ul style="list-style-type: none"> <li>▪ Ensure adequate supplies of irrigation water for agricultural and fish-farming production <u>and other economical sectors</u> through construction and upgrading of <b>large-scale irrigation</b> and drainage systems <del>##</del><u>(not only large-scale irrigation systems)</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ TO BE COMPLETED</li> </ul>	<ul style="list-style-type: none"> <li>▪ Investment program for 2006-2010 implemented</li> <li>▪ Income from agricultural production activities increases 10% per annum</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Ensure adequate supplies of irrigation water for agricultural production in poor and remote areas through construction and upgrading of <b>small and medium scale irrigation</b> and drainage systems <u>(this and above can mix)</u></li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Investment program for 2006-2010 implemented</li> <li>▪ Income from agricultural production activities in poor and remote areas increases 15% per annum</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Support <b>integration</b> of remote area terrace/agro-forestry production systems and hydro-power / irrigation / domestic water supply infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Address diverse regional needs through establishment and implementation of <b>regionally defined irrigation development plans</b></li> <li>▪ <u>Water works serve a multi-purpose, shift toward high-value crops.</u></li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
1.2. Strengthen competitiveness and international integration	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>Goal 2. Improve social environment and living conditions for rural people, especially the poor (including social empowerment of the poor)</b>			<ul style="list-style-type: none"> <li>▪</li> </ul>
2.1. Reduce the percentage of poor and hungry households	<ul style="list-style-type: none"> <li>▪ <b>Link planning of irrigation provision to social policies</b> and targeted to the needs of poor households</li> </ul>	<ul style="list-style-type: none"> <li>▪ TO BE COMPLETED</li> </ul>	<ul style="list-style-type: none"> <li>▪ Irrigation planning reflects and supports social priorities</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Focus on improving irrigation facilities under <u>national and regional Decision-134 and in Programme-135-water resources development programmes</u> maintained and enhanced</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Percentage of rural households benefiting from irrigation increased to X% by 2010</li> </ul>

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	<ul style="list-style-type: none"> <li>Increased range of <b>choices for sustainable irrigation technologies</b> and financial mechanisms that reflect conditions of different users and regions available</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of rural households with access to</li> </ul>
	<ul style="list-style-type: none"> <li>Options to improve the <b>sustainable operation and maintenance</b> of existing and new irrigation facilities developed and implemented</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	
	<ul style="list-style-type: none"> <li>Improved and integrated <b>PIM</b> programme developed and implemented</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Improved and integrated PIM program implemented in all provinces by 2008</li> </ul>
2.2. Promote gender and ethnic equity	<ul style="list-style-type: none"> <li><b>MARD's Gender Strategy</b> implemented</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>% female staff in irrigation agencies</li> </ul>
	<ul style="list-style-type: none"> <li>Guidelines and procedures for <b>mainstreaming gender in local level</b> irrigation prepared and implemented</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Guidelines prepared and procedures introduced by end 2006</li> <li>% women in user group management</li> </ul>
2.3. Reduce vulnerability			
<b>Goal 3. Ensure environmental sustainability</b>			<ul style="list-style-type: none"> <li></li> </ul>
3.1. Identify and effectively conserve biodiversity, environmentally critical areas and resources	<ul style="list-style-type: none"> <li>Develop irrigation development solutions to address <b>desertification, flooding and salt intrusion</b></li> </ul>	<ul style="list-style-type: none"> <li>TO BE COMPLETED</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Establish network to <b>monitor water quality</b></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Establish system for assessing <b>quantity and quality</b> of surface and underground water sources</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
3.2. Enhance participatory sustainable management system for natural resources	<ul style="list-style-type: none"> <li>Community-based water quality management systems developed, piloted and implemented</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Water quality threats from livestock and productive activities reduced</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Manure management plans established and implemented in livestock intensive areas</li> <li>Wastewater treatment for 30% handicraft villages</li> </ul>
3.3 Enhance environmental management of rural service providers, and the environmental sustainability of major infrastructure	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Goal 4. Creating institutional capacity for more effective and dynamic sector management</b>			<ul style="list-style-type: none"> <li></li> </ul>

Objectives	Interventions	Implementation responsibility (Lead/supporting institution and/or program)	Indicators
4.1. Improve efficiency and performance	<ul style="list-style-type: none"> <li>▪ <b>Study and pilot</b> modern irrigation technologies and <b>options for exploiting underground water sources</b> <u>(It is not DWR's responsibility)</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ TO BE COMPLETED</li> </ul>	<ul style="list-style-type: none"> <li>▪ Studies completed and learning reflected in practice</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Establish, pilot and mainstream legal framework for <b>decentralization</b> of irrigation planning and management to provincial and lower level <u>(including irrigation management transfer to farmer)</u></li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Strengthen capacity for <b>integrated projection and planning</b> of irrigation and water management at the basin, province and regional level</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Define <b>investment policy</b> aimed at mobilizing national and international capital resources for development, renovation and maintenance of irrigation systems, including in particular <b>private sector investments and user contributions</b></li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Improved <b>monitoring and evaluation</b> system developed and used</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved M&amp;E system institutionalized</li> </ul>
	<ul style="list-style-type: none"> <li>▪ <b>Revise-Extend mandates and functions of state agencies</b> at central, provincial <del>and</del> district <del>and commune</del> levels in light of objective to decentralise and enhance <del>private</del><u>collective</u>, <u>private</u> sector and user involvement in irrigation</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Implement <b>capacity building and human resource</b> development programme for central, provincial, district and commune levels that reflect decentralisation and private sector/user involvement in collaboration with Universities, <u>College for Management of Agriculture and Rural development 1, 2</u> and technical schools (emphasising a) provincial level strategic planning, b) integrated irrigation and agricultural production, c) application of PIM and d) technology development)</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Capacity building programme developed by mid 2006</li> <li>▪ 100% provinces have strategic irrigation plans by 2008</li> <li>▪</li> </ul>
	<ul style="list-style-type: none"> <li>▪ System for better <b>information dissemination and coordination</b> with other ministries, media and the public developed</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>

Objectives	Interventions	Implementation responsibility (Lead/supporting institution and/or program)	Indicators
	<ul style="list-style-type: none"> <li>▪ Strengthen management arrangements and procedures for <b>river-basin planning</b> and operation of <b>inter-provincial</b> hydraulic works</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Coordination system established by end 2005</li> </ul>
<p>4.2 Strengthen involvement of users in decision-making, management and financing</p>	<ul style="list-style-type: none"> <li>▪ Provide guidance and supervision to speed-up provincial implementation of the strategic framework and road map for development of <b>PIM</b> and issuing of regulations supporting irrigation planning, development and management by user groups (cooperatives, cooperative groups, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ To be developed</li> </ul>	<ul style="list-style-type: none"> <li>▪ All small scale irrigation systems planned and managed at community level in accordance with PIM principles by 2008</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Review existing obstacles for <b>private sector</b> involvement in investment and management of irrigation and develop and apply appropriate regulations accordingly</li> <li>▪ <u>Guide local authorities to apply a tender method for irrigation management, especial canal and small works, in order to implement Decree No31/2005/ND-CP dated 11<sup>th</sup> March, 2005.</u></li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review conducted and relevant regulations and incentive systems promulgated by 2007</li> <li>▪ Private sector investments increased by X % and number of schemes managed by private companies increased by Y%</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Establish Decree on settlement of <b>administrative violations</b> in exploitation and protection of hydraulic works</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decree established and implemented</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Develop and implement <b>financial policy</b> and regulations aimed at reducing state subsidies for irrigation development in non-poor areas and cost recovery through user tariffs and local contributions</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>