



**MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY**

OVERVIEW OF INDONESIAN WATER SYSTEM AND POLICIES

Presented by:

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I. Water Resources Management Reform;

- To anticipate the complexity of WRD Problems and changes in WRD Paradigms, The Water Law No.7/2004 has been established which consists of: conservation, utilization and control of destructive force; supported by three pillars of community participation, steady institutional and good information systems and data.
- The Law derived into seven Government Regulations.



PRINCIPLES OF POLICY REFORM

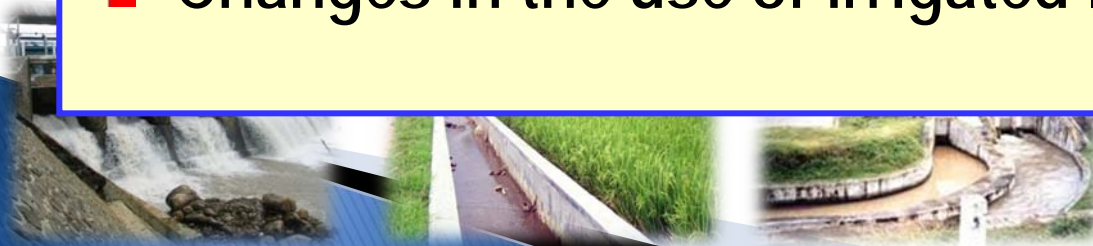
- **Clarity of WRM responsibilities between Central and Regional;**
- **Institutional arrangement of WRM;**
- **Strengthening and integration of planning and implementation of WRM;**
- **Developing a network information system of WRM;**
- **Strengthening public participation;**
- **Strengthening the financing system for the sustainability of WRM.**



II. Irrigation Management Policy in Supporting Agricultural Development

The Complexity of Problems in Irrigation Management:

- Vulnerability of water availability;
- Shifting value of water from a public good category to become an economic and social good category;
- Increased competition in water use: irrigation and other sectors;
- Changes in the use of irrigated lands.





PRINCIPLES OF PPSIP

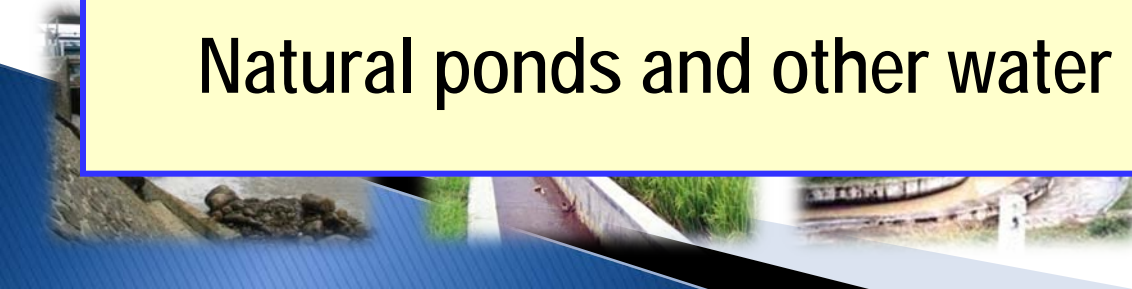
- Participative approach involving all Stakeholders;
- Conducted in an integrated manner considering the interests of the upper, middle, and downstream users;
- **Distribution of authority and responsibility: Central, Provincial, Regency/Municipality, and farmers;**
- **Redefinition of irrigation management institutions, empowerment of WUAs, and establishment of Irrigation Commissions;**
- **Appropriate Asset Management to ensure efficient financing of irrigation management.**



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III. Irrigation Management in National Development Planning

- Irrigation sector is intended to support the national priority on food security within 2010-2014.
- Irrigation management policies in the Medium-term National Development Plan (RPJMN) 2010-2014, is carried out through activities of Irrigation, Swamp and Other Water Networks and supported by activities of Management and Conservation of Reservoirs, Ponds, Natural ponds and other water reservoirs





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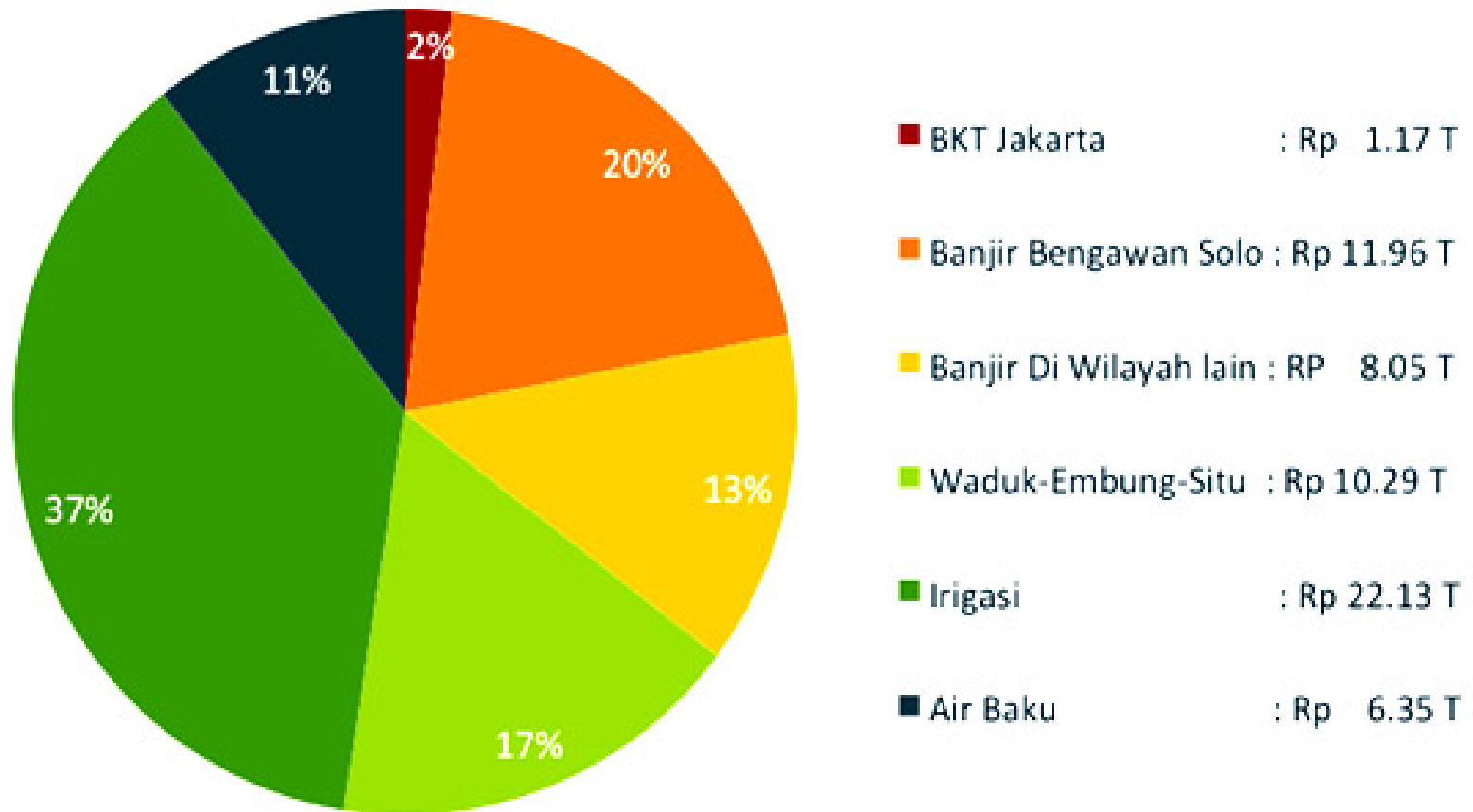
POLICIES IRRIGATION DEVELOPMENT IN "RPJM" 2010 - 2014

- **New irrigation areas outside of Java and improve the function of the irrigation network;**
- **Rehabilitate the damaged networks, in high productive area;**
- **Optimization of irrigation services through the O&M of irrigation networks;**
- **Increasing participation of farmers in the O&M activities through out-contracting system;**
- **Improving the efficiency of water utilization through water-saving such as SRI, water re-use, canal lining etc., and supporting local governments through the provision of "DAK".**



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FUND ALLOCATION FOR WATER RESOURCES MANAGEMENT IN "RPJM" 2010 - 2014





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TARGET OF MANAGEMENT AND CONSERVATION OF RESERVOIRS, PONDS, ETC.

No	Indicators	Targets
1	Number of Dams and ponds/natural ponds that are constructed	11 Dams finished; 1 Dam in construction process; 158 ponds/natural ponds finished
2	Number of Dams, ponds/natural ponds that are rehabilitated	29 Dams finished; dan 298 ponds/natural ponds finished
3	Number of Dams, ponds/natural ponds that are operated and maintained	182 Dams, ponds/natural ponds



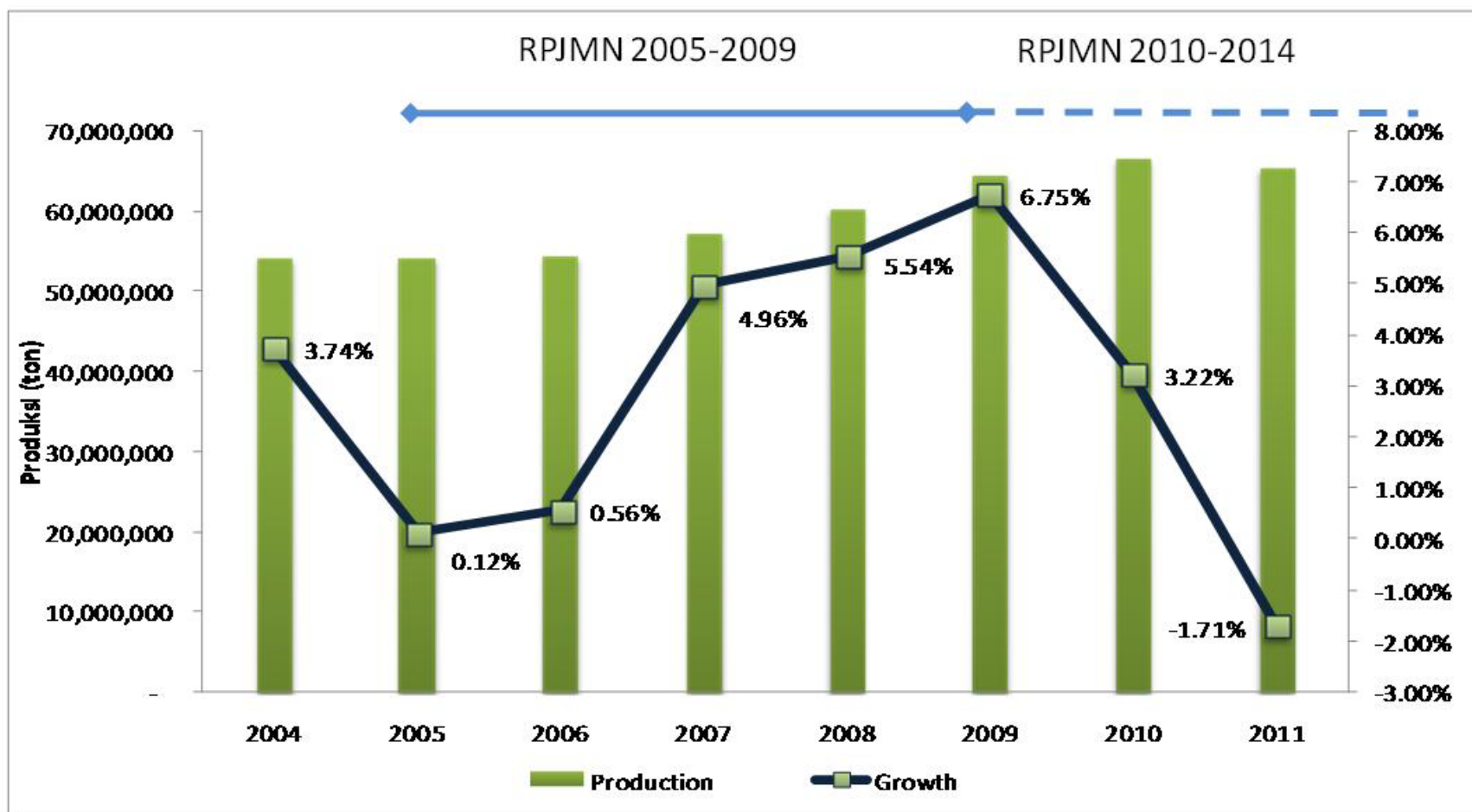
IV. Challenges Ahead - National Food Security

- Productions of paddy/rice at the national level in the last few years have significantly increased;
- Achievement of rice production in 2009 which reached 64.4 million tons is the highest;
- The global financial crisis which occurred at the end period of RPJMN 2005-2009 and the beginning of RPJMN 2010-2014 has impacted domestic food price;
- Indonesia decided to increase paddy production growth to 5% every year for 10 million tons surplus, start from 2014.



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PADDY PRODUCTION AND ITS GROWTH WITHIN 2001-2011





Challenges of Irrigation

- Due to natural disasters, land use change, lack of O&M, and forest destruction and sedimentation, current irrigation network in good condition is 48%, while the rest are in damaged ranging from minor, moderate, or severe;
- Based on GR No. 20 of 2006 and Ministerial Decree No. PU. 390/KPTS/M/2007 most of responsibility in managing and developing of irrigation is under Local Governments is 78% for development, and 62% for management;
- This aspect is currently being scrutinized to anticipate challenge of irrigation for food security.



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OVERVIEW OF CONDITION OF IRRIGATION INFRASTRUCTURES

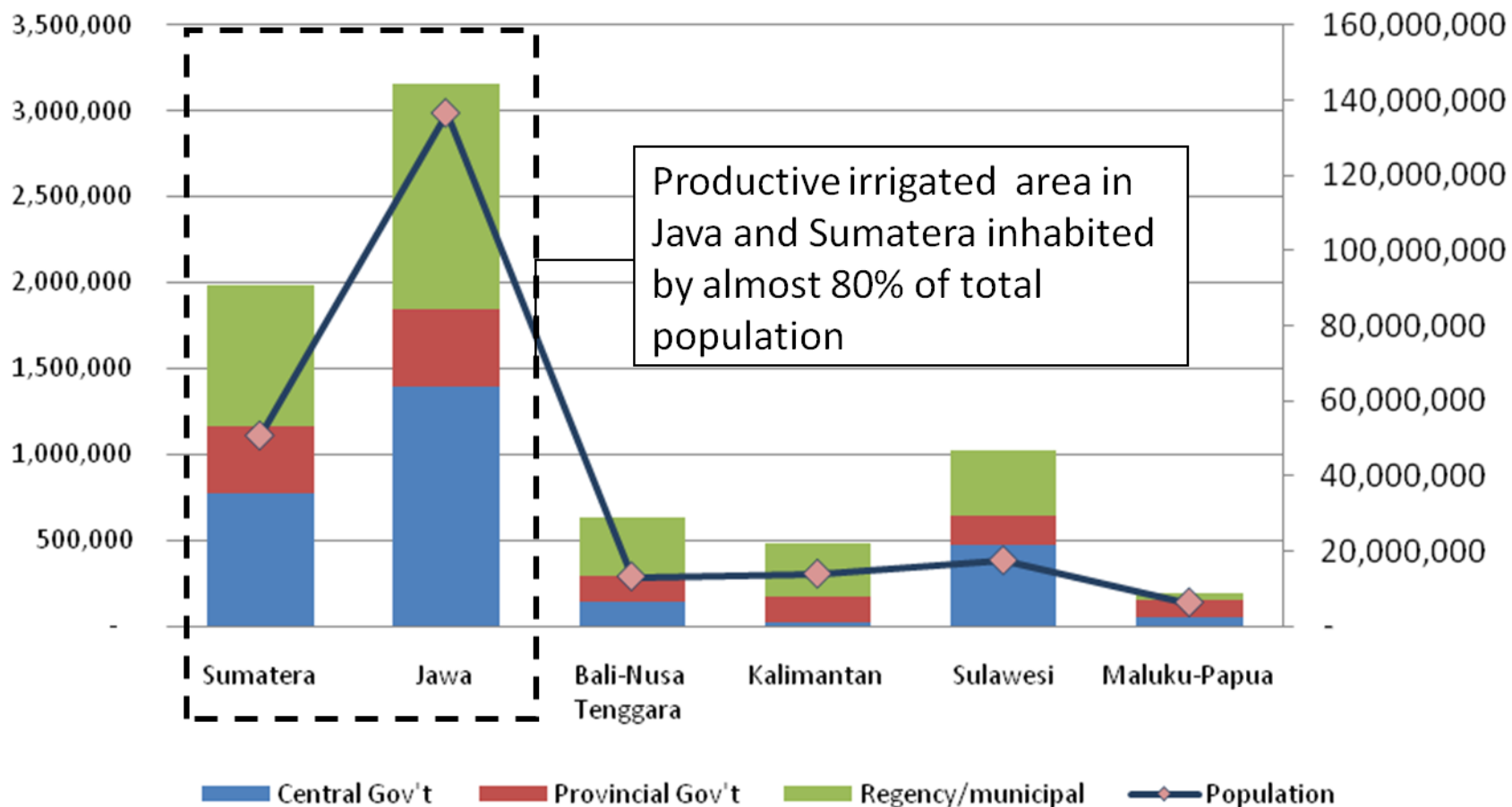
Condition/Year	1999		2010		Damage rate in 11 years
	(ha)	(%)	(ha)	(%)	
Good	5,254,951	77.6%	3,481,298	48.1%	29.5%
Minor/Moderate	1,389,938	20.5%	3,043,313	42.1%	21.6%
Severe	126,127	1.9%	705,572	9.8%	7.9%
Total	6,771,016		7,230,183		



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DISTRIBUTION OF IRRIGATION VS POPULATION BASED ON BPS AND PWD No. 390/KPTS/M/2007

Distribution of Irrigated Area and Population



Source: Kepmen PU. 390/KPTS/M/2007 and BPS 2011



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Enhancement of Best Practice in Irrigation Management

- Capacity building of WUAs, and WUAs' Federation by effective technical assistance;
- Improving the capacity of all institutions of O&M at all levels and conducts effective interagency coordination;
- Continuous O&M, rehabilitation and improvement with appropriate balance between Hard and Soft Components;
- Appropriate balance amongst HRD; Institutional setting, O&M Technology; adequate O&M Financial support; and Sensible Regulatory Instruments and Enforcement.



V. CONCLUSIONS AND RECOMMENDATIONS

- Changes of paradigm in Indonesia with the issuance of Law No. 7/2004 shown significant improvement;
- Pilot reforms shown satisfactory results;
- Target for expansion of agricultural area require proper synchronization in the near future;
- Forecast in rice production decline in 2012 warrants a change in strategy to prevent it from happening by virtue of increase in production and income, echo-friendly and low cost technology, as well as agro-based Industry;



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THANK YOU





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Annexes

First year achievement of RPJMN 2010–2014



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TARGETS OF IRRIGATION DEVELOPMENT AND MANAGEMENT IN "RPJM" 2010 - 2014

No	Indicators	Targets
1	Service area of irrigation networks built/upgraded (1000 ha)	129,38
2	Service area of irrigation networks rehabilitated (millions ha)	1,34
3	Service area of irrigation networks operated and maintained (millions ha)	2,315
4	Service area of swamp networks extended (1000 ha)	10
5	Service area of swamp networks rehabilitated (1000 ha)	450
6	Service area of swamp networks operated and maintained (millions ha)	1,2
7	Number of groundwater wells built/upgraded (units)	70
8	Number of groundwater wells rehabilitated (units)	1.875
9	The number of groundwater wells operated and maintained (units)	2.192
10	Services area of fishpond water system networks built/upgraded (ha)	1.000
11	Services area of fishpond water system networks rehabilitated (ha)	175.000

Source: RPJM 2010-2014



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FIRST YEAR ACHIEVEMENT AND ESTIMATION OF IRRIGATION ACTIVITIES, 2011-2012

No	Indicators	RPJMN Targets	Realizations/Targets			Percentage until 2012
			2010	DIPA 2011	RKP 2012	
1	Service area of irrigation networks built/upgraded (1000 ha)	129,38 Thousand	115 Thousand	56.78 Thousand	79.34 Thousand	194%
2	Service area of irrigation networks rehabilitated (millions ha)	1,34 Million	0,29 Million	0.17 Million	0.42 Million	66%
3	Service area of irrigation networks operated and maintained (millions ha)	2,315 Million	2,315 Million	2,15 Million	2.315 Million	100%
4	Service area of swamp networks extended (1000 ha)	10 Thousad	8,08 Thousand	56,26 Thousand	23.75	881%
5	Service area of swamp networks rehabilitated (1000 ha)	450 Thuosand	79,37 Thousand	171.30 Thousand	98.75	78%

Source: MPW

Continued to next slides



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FIRST YEAR ACHIEVEMENT AND ESTIMATION OF IRRIGATION ACTIVITIES, 2011-2012

Continued from previous slides

6	Service area of swamp networks operated and maintained (millions ha)	1,2 Million	1,11 Million	0,94 Million	1.00	83%
7	Number of groundwater wells built/upgraded (units)	70	84	117	131	474%
8	Number of groundwater wells rehabilitated (units)	1.875	97	326	385	43%
9	The number of groundwater wells operated and maintained (units)	2.192	188	458	391	47%
10	Services area of fishpond water system networks built/upgraded (ha)	1 Thousand	1.02 Thousand	9.5 Thousand	2.25 Thousand	1277%
11	Services area of fishpond water system networks rehabilitated (ha)	175 Thousand	2,2 Thousand	7,55 Thousand	4 Thousand	8%



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FIRST YEAR ACHIEVEMENT AND ESTIMATION OF RESERVOIR ACTIVITIES, 2011-2012

No	Indicator	Target RPJMN	Realisation/Target			Presentage achived till 2012
			2010	DIPA 2011	RKP 2012	
1	Number of Dams and ponds/natural ponds constructed	11 Dams finished; 1 Dam in construction process;	-	8 Dams in construction process	9 Dams in construction process	0%
		158 ponds/natural ponds constructed	45 ponds	60 ponds/natural ponds constructed.	87 ponds/natural ponds constructed.	122%
2	Number of Dams and ponds/natural ponds rehabilitated	29 Dams;	12 Dams;	39 Dams;	24 Dams;	259%
		298 ponds/natural ponds	21 ponds	50 ponds/natural ponds	62 ponds/natural ponds	45%
3	Number of Dams and ponds/natural ponds operated	182 Dams,ponds/natural ponds	14 Dams	179 Dams/ponds/natural ponds	389 Dams/ponds/natural ponds	214%
4	Number of water source areas conserved	15 areas	13 areas	13 areas	36 areas	413%