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Republic of Tajikistan***



# **Conception of the water management reform in the Republic of Tajikistan**

**Dushanbe, 05 July 2010**

## ***Purpose of the water management reforma***

The concept of reform of a water management of Republic Tajikistan defines the purposes, problems and ways of reforming of a water management of Republic Tajikistan.

Concept main objective is creation of economic, legal and organizational conditions for break-even activity of branch, the further development and reforming of a water management which is directed on efficiency increase, reliable functioning of all systems ирригации, land improvements and water supply of settlements

## **Ministry of melioration and water resources**



The Ministry is the central authority in the field of water resources and land reclamation and executes functions on development of a uniform state policy and is standard-legal regulation in this sphere.

### **The basic directions of activity**

- Realization of governmental water politic
- Management, use and protection of water resources
- Development, irrigation and land reclamation
- Rural water supply and water pastures
- Rehabilitation of embankments and struggle against flooding
- Including the new technologies and methods of water irrigation

# ***Ministry of melioration and water resources***

## ***Main aim and tasks***

- **Conducting a uniform state policy in the field of land reclamation;**
- **Working out and realization of long-term and short-term government programs on an effective utilization and protection of water resources, land reclamation development, rural water supply and water pastures, protection of territory against harmful influence of waters;**
- **Working out of the differentiated tariffs for services in water delivery taking into account market cost of charges and operation of water economic objects;**
- **Conducting the state account and monitoring of a condition of water resources, the control over a technical condition of water economic objects;**
- **Assistance rendering on attraction of investments for reconstruction and development of objects of a water economic complex and introduction of modern technologies of management on use and protection of water resources;**
- **Assistance on granting of the state support on the maintenance and operation of objects of a machine irrigation;**
- **Drawing up of water economic balances and schemes of complex use of water resources on pools of the rivers, territories and republics as a whole;**
- **Conducting the State water cadastre;**
- **Creation and use of a database and information system on formation and use of water resources;**
- **The organization of vocational training of workers of branch, their retraining, improvement of professional skill and training.**

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# Ministry of melioration and water resources

## Functioning structure of MMWR of the Republic of Tajikistan



By the existing and functioning structure there is 161 divisions in MMWR

## **Ministry of melioration and water resources**

**Staff, fond of salary on 01/01/2010**

<b>Identification</b>	<b>Quantity Of workers</b>	<b>Fomd of salary thous. somoni</b>	<b>Monthly salary, somoni</b>
Hand overed	7976	18675,0	195
Under construction	2256	6612,7	244
Under industrial	161	181,4	94
In Ministry Departments	95	591,0	518
<b>TOTAL</b>	<b>10488</b>	<b>26060,1</b>	<b>207</b>

## **Water resources of Tajikistan**

<b>Glacier</b>	<b>845 km<sup>3</sup> (volume), 11 146km<sup>2</sup> (area)</b>
<b>River drain</b>	<b>64km<sup>3</sup>/year(55,4% Aral bassin), 947 (quantity), 30000km (total length)</b>
<b>Lake</b>	<b>46,3km<sup>3</sup> (volume), 705km<sup>2</sup> (area), 1300 (quantity)</b>
<b>Reservoir</b>	<b>15,34km<sup>3</sup> (volume), 7,63km<sup>3</sup> - 13% Aral bassin (using), 664km<sup>2</sup> (area)</b>
<b>Underground water</b>	<b>18,7km<sup>3</sup>/year(2,8km<sup>3</sup> – using resources)</b>
<b>Returnable water</b>	<b>3,5-4,0km<sup>3</sup>/year (3,0km<sup>3</sup> – collector- drain, 0,50km<sup>3</sup> – household)</b>



After declaration of independence of Republic Tajikistan to water management problems it began to be given more attention. Under the initiative and the commission of the President of Republic Tajikistan Emomali Rahmon are developed and are realized «the Program of improvement of maintenance of the population of Republic Tajikistan by pure potable water on 2008-2020y.» «The Plan of development of the new irrigated earths in Republic Tajikistan for 2008-2012», «About measures on improvement of a meliorative condition of irrigated farmlands of Republic Tajikistan for 2010-2014», «the Program of restoration of pressure head pipelines of pump stations of the Ministry of land improvement and water resources of Republic Tajikistan for 2010-2015» and others.

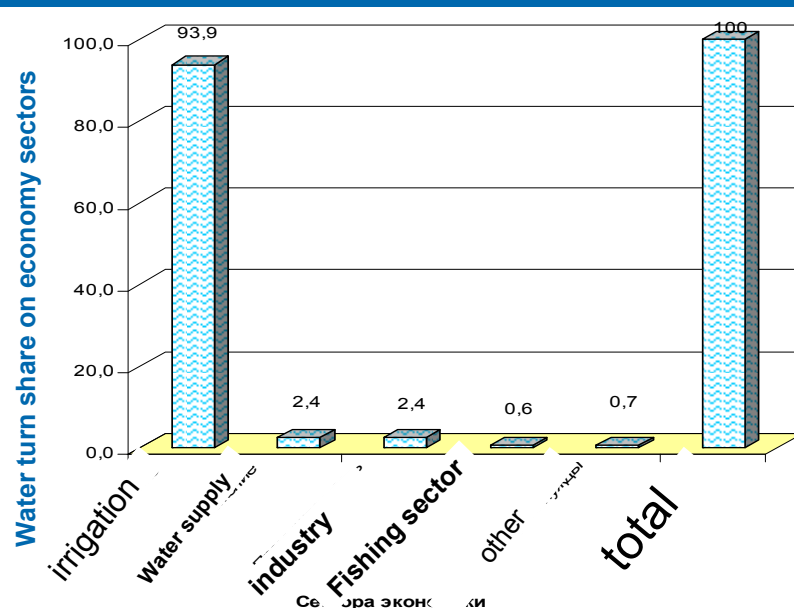
Volumes of submitted irrigation water as a result have during the last years increased, the meliorative condition of the irrigated earths has improved, are replaced the equipment a number of pump stations, involved grant both proceeds of credit and investments of foreign donors. In branch 5 projects for the sum of 145,9 million US dollars are realized.

The tendency in improve in maintenance with agricultural population drinking water was outlined.



## Using of water resources

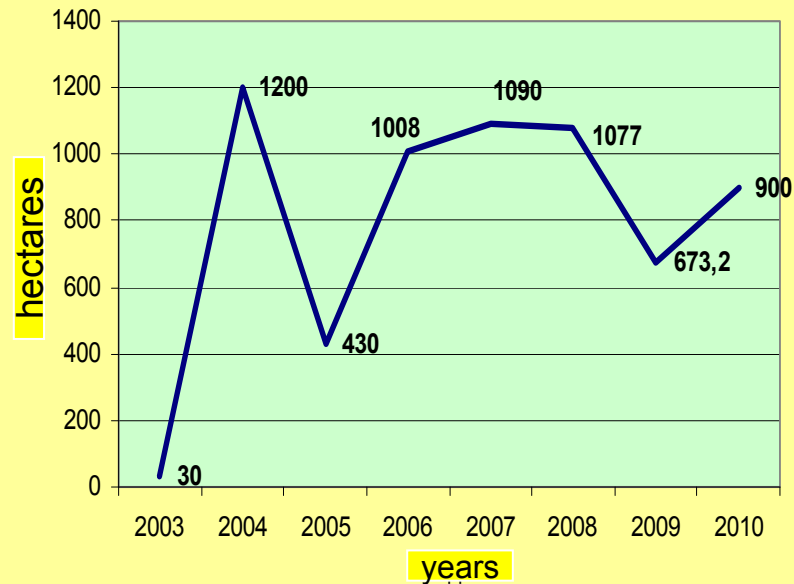
№	Years	Limit of using water (thous. m3)	Main water outlet (thous. m3)	Water supply (thous. m3)	Including		
					Irrigation (thous. m3)	Industrial (thous m3)	Missing (thous. m3)
1.	2000	10 220 000	9 187 975	7 534 140	6 111801	1 423339	1 653835
2.	2005	10 150 000	9 482 504	7 775 654	5 958996	1 816658	1 706850
3.	2009	10 705 100	8 299 460	6 805 558	4 738094	2 067464	1 493902



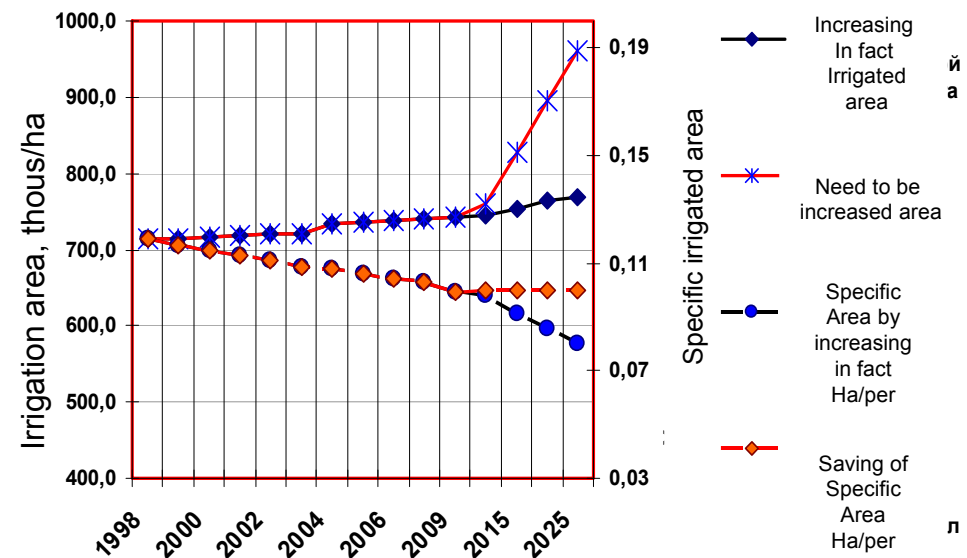
### 2009 year.

- Main water outlet– 8299460,0 thous.m3
- Water supply – 6805558 thous.m3-
- Including by pumping stations– 5320887,04 thous.m3
- Using of electricity for 1 m3 – 0,267 kWa.

# Development of new lands



According to the Governmental orders of the Republic of Tajikistan from December, 2nd 2006y., № 517 and from December, 26th 2008y., №620 input of the new irrigated earths of 4942 hectares in Karateginsky group of areas till the end of 2010 and 1767ra in other areas of republic up to the end 2011r is provided.



## ***Objects of a perspective irrigation for prime development***

<b>№</b>	<b>Name of the objects</b>	<b>Area, thous he</b>	<b>Planning zone</b>
1	Irrigation of Dangara network	75,0	Khatlon
2	Irrigation of Zarafshon network	35,0	Sogd
3	Irrigation of Kiziling network	25,0	Sogd
4	Irrigation of Beshkent valley	12,0	Khatlon
5	Irrigation of under Kafarnigan reservoir	65,0	Khatlon
6	Irrigation of land under Baljuvan reservoir	20,0	Khatlon
7	Small economical irrigation lands in different parts of country	60,0	Tajikistan
	<b>TOTAL</b>	<b>292,0</b>	

# Irrigation lands of Tajikistan

**Total length of irrigation lands**

*including:*

- land of self irrigation area
- land of pumping irrigation area

**743,6 thous, ha**

**359,3 thous, ha**

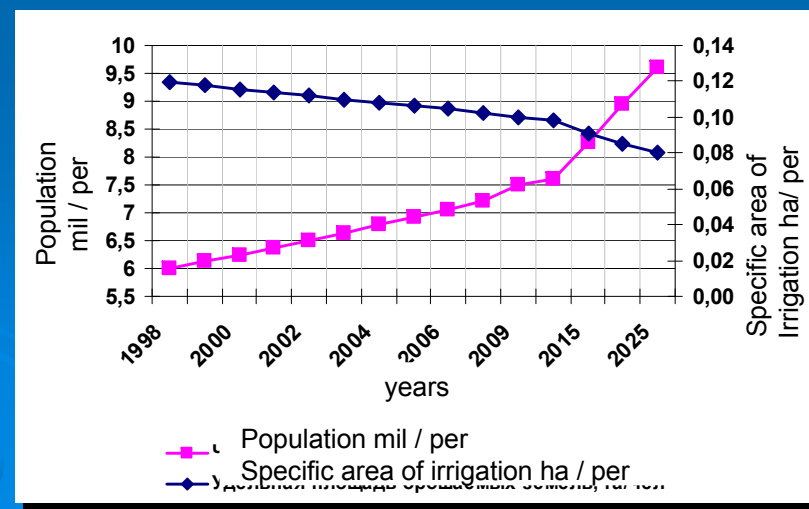
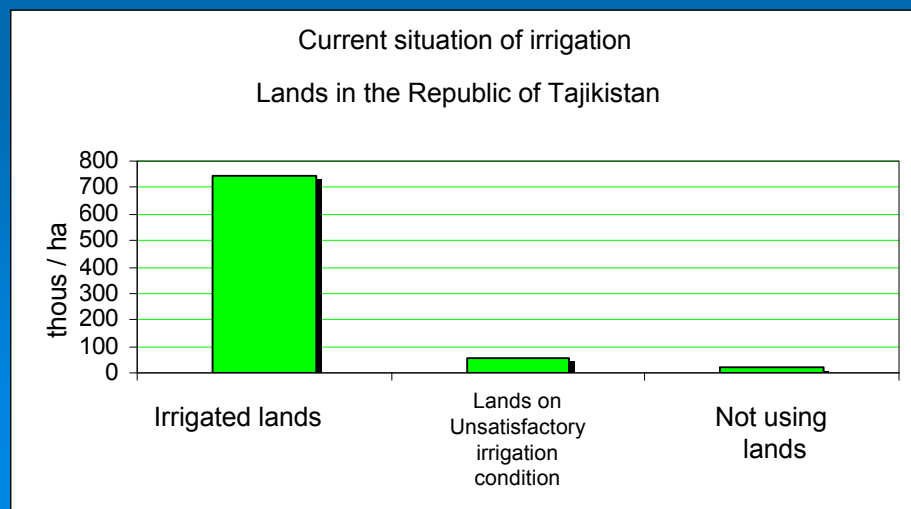
**384,3 thous, ha**

**Unsatisfactory irrigated area**

**58,4 thus, ha**

**Average area of irrigated land per person**

**0,1ha/per**



## ***Irrigation of lands***

### **Irrigation network: total length– 29793,9 км, including**

- On farm network – 6041,9 км
- In farm network – 23752 км
- Concrete lined – 2132 км
- Closed– 599,2 км

### **Collector and drain network: length - 13096,2 км, including**

- On farm network – 2314,2 км
- In farm network – 9782 км
- Closed– 2000 км

### **Hydro technical structures**

- On irrigation canal– 7099 pcs.
- On collector and drain network – 328 pcs.

### **Hydro posts**

- On irrigation canal– 3720 pcs
- On collector and drain network– 138 pcs.

## ***Irrigation of lands***

### On farm hydro technical structures:

- Pumping stations 486 pcs.
- equipments 1782 pcs.
- transformers 374 pcs.
- Tube wells 1794 pcs.
- Irrigation network 6041,9 км
- Collector drain net 2314,2 км
- hydro tech struc 7427 шт.

### In farm hydro technical structures:

- Pumping station 64 pcs.
- equipments 260 pcs.
- Tube wells 642 pcs.
- Irrigation network 23752 км
- Collector drain net 9782 км
- Including closed collector drain net 2000 км

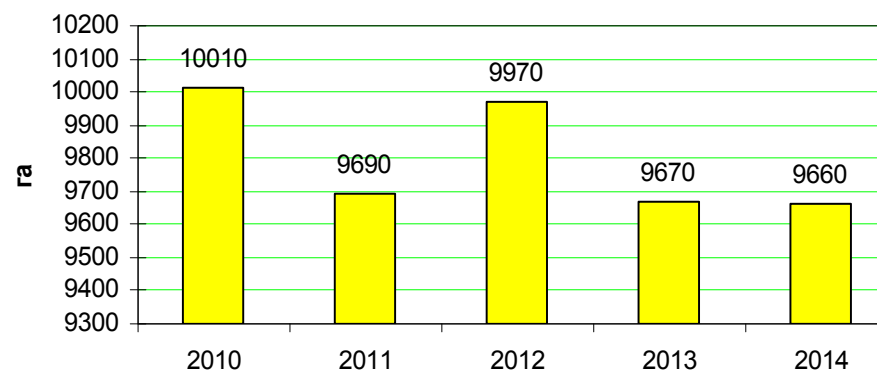
# Melioration of the lands

## Distribution by raions and oblasts of irrigation salted lands in the Republic of Tajikistan

No	Name of oblast	Irrigation area	Not solid lands	Little solid lands	Solid lands	Too solid lands
1	Khatlon	336296	291946	32109	9258	1617
2	Sogd	284063	284063	41578	9629	2318
3	Raions under Republic	105278	26594	-	56	50
4	Badahshan	18103	18103	-	-	-
	<b>Bcero</b>	<b>743640</b>	<b>620706</b>	<b>73687</b>	<b>18943</b>	<b>3985</b>

According to the Decision of the Republic of Tajikistan Government «About measures on improvement of a meliorative condition of irrigated farmlands of Republic of Tajikistan for 2010-2014 years» is planned to improve meliorative conditions of the lands on the area of 49000 hectares including

Structure of the improvement of the Meliorative situation of the lands on 2010-2014 years





## **Melioration of the lands**

The meliorative condition of the irrigated earths depends on qualitative work of collector-drainage system (CDS). Extent intereconomic CDS makes 2205,33 km from them clearing of 2314,2 km demand. The demanded volume of clearing makes 7278,8 thousand m<sup>3</sup>. From available 1823 chinks of a vertical drainage about 74 % are in a non-working condition. An unsatisfactory condition of operational roads and a communication system complicate management of irrigational systems. The total area of the irrigated lands provided by drainage makes 327899ha,

№	Name of raion and oblast	Horizontal drainage, ha		
		Total	including	
			Open type	Closed type
1	Khatlon	230921	185556	45365
2	Sogd	86253	52488	33765
3	Raions under Republic	10725	8226	2499
	<b>Total in Republic</b>	<b>327899</b>	<b>246270</b>	<b>81629</b>

## ***Rural water supply and water pastures***

Population of the Tajikistan 1.01.2010	7,529 mil.per.
including:	
-rural population	5,542 mil.per. (73,6%)
-town population	1,997 mil.per. (26,4%)

Average population density – 48,9 person for 1 km<sup>2</sup>.

Population with access to pure drinking water -	4,01 mil.per. (59%)
including:	
-rural population	near to 49%
-town population	93%

2,9 mil.per. Do not have access to pure drinking water,  
- 2,8 mil. of them are rural population.

From 62 towns, raions and villages only 52 have the centralized water supply system and only 28 have the canalization system.



## **Rural water supply and water pastures**

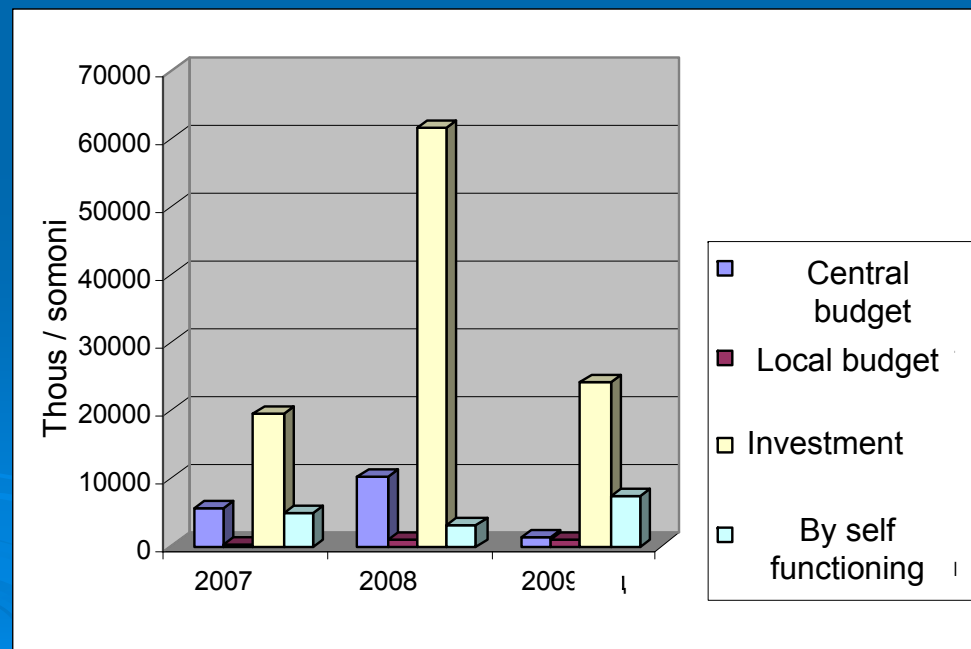
On 01 January 2008 country had:

- 199 local centralized water supply systems,
  - 210 separate water supply system,
  - 1952,1 km of different length and diameter of water supply system,
  - 2530 km of street type water supply system,
- including need to be replacement - 1167,7 km and  
intraquarter and intradomestic water supply network - 815 km

**Program for improving drinking water supply for the population of the Republic of Tajikistan for 2008-2020 years.**

Accepted by the Governments of the Republic of Tajikistan on December 2006.

The area water pastures in the country makes 404 thousand in hectare on which in a year supplies 2,7mil. m3 water.



## ***Rehabilitation of embankments and fight against flooding***



The ministry of melioration and water resources of the Republic of Tajikistan is the main authorised body of the country on struggle with rainstorm and flooding and annually carries out great volumes of works on strengthening of coast of the rivers iron-concrete cubes and gabion mattresses, spurs and banquetts.



During the last years at the expense of the investment dams for the sum of 75 million US dollars are constructed. Only on a river basin Amu Darya for last 2 years for embankment works more than 20 mln. dollars are spent



Besides on balance of the Ministry there are dams for the 112 million somoni. For operation and repair of these dams it is annually necessary for 5 million somoni.

## Pump stations

	Pump station , pcs.		aggregates, nos.		Vertical boreholes, pcs.		substatio n, nos	Pressure pipelines, m	Catchmen t's area, ha
	Всего	Испра в-ные	всего	Исправ- ные	всег о	Исправ- ные			
<b>Total by Ministry</b>	<b>486</b>	<b>408</b>	<b>1782</b>	<b>1148</b>	<b>1794</b>	<b>690</b>	<b>374</b>	<b>962300</b>	<b>384266</b>

## Used power by pump stations

	years	debt	Pumped water	Used power	Power cost	payment	Total debt	Power expendi ture for 1m3 of water
		Thousand somon	(thous.m3)	( thousand KWT)	Thousand somon	Thousand somon	Thousand somon	
<b>Total by Ministry</b>	2005	15255,76	5864616,8	1505725,77	10082,09	6569,11	18768,74	0,257
	2006	18843,88	5870365	1598863,84	11044,52	844,19	29044,21	0,272
	2007	28878,4	5651444,9	1564820,76	16550,32	3718,53	41710,19	0,277
	2008	41524,97	5965100,1	1499763,61	52341,75	1515,48	92351,24	0,251
	2009	92067,83	5320887,04	1418260,34	61539,89	21680,58	131927,14	20,267

## Cost of water supply per 1 ha of irrigated lands by pump stations

№	Cascades	To be irrigated lands, ha	Cost for 1ha/ somoni	consumption & power cost		Pumped water and its cost	
				thous. kwt/h	somoni	thous. m3	somoni
1	I - Cascade	244023	180	910157,0	13652354,8	4021053,9	43924140,0
2	II - Cascade	61949	191	231057,4	3465860,7	1020806,5	11843992,1
3	III -Cascade	25862	202	96460,1	1446901,3	426158,6	5233920,5
4	IV -Cascade	22275	214	83081,3	1246219,4	367051,4	4757231,7
5	V - Cascade	5426	225	20237,9	303568,4	89410,6	1219534,7
6	VI –cascade	1522	236	5676,8	85151,3	25079,8	359111,3
7	VII cascade	943	247	3517,2	52758,0	15538,9	233049,6
<b>Bcero</b>		<b>362000</b>		<b>1350187,6</b>	<b>20252814</b>	<b>5965099,7</b>	<b>67570980,0</b>



## Transportation and machinery

As of June 1, 2010 on the balance of the lower organization of Ministry are:

- Machineries different types and brands -	1127 nos.
out of this functioning	402 nos
- Transportation of different types & brand	1463 nos
out of this functioning	520 nos

The rated resource of machineries & transportation have been identified maximum up to 11 years. During 15 years have not done any major repairs, therefore technical park is physically and morally old.

**In order to implement the works with low first cost and in optimal timeframe, it is necessary to renovate and refill the park with new machinery and transportation.**

Estimated cost is about **US\$ 50 million** .

At the end of 2008 and in April 2010 had been received in total-71 nos new techniques & motor transports. Out of this excavators - 34 nos, trucking - 15 nos., bulldozers - 12 nos, autocranes - 2 nos., motor-truck concrete – 1 nos., forklift trucks – 5 nos., grader - 1 nos. , boat - 1 nos.



## Water user associations (WUA)

At present in the republic established about **200 WUA with service area 207 thousand ha.**,

including:

- |                     |                                              |
|---------------------|----------------------------------------------|
| - in Sogd Region    | 77 WUA with service area 72,3 thousand.ha,   |
| - in Khatlon Region | 89 WUA with service area 122,7 thousand. ha. |
| - in RRS            | 32 WUA with service area 11,2 thousand. ha.  |
| - in GBAO           | 2 WUA with service area 837,0 ha.            |

**In order to improve WUA work, it is necessary:**

- **to assist in taking over for the balance of WUA on- farm irrigation networks & to solve financial issues for their rehabilitation ;**
- **Support of WUA at the expense of water supply services;**
- **Carrying out measures on concluding agreements, using and registration of water among WUA, dekhkan farms and water management organizations.**

## Economical indicators

- Annual budget of Ministry in 2010 including
  - salary with FCZN tax 28287,1 thous. somoni
  - general construction 14686,8 thous. somoni ,
  - отрасль науки 8000,0 thous. somoni ,
  - 138,1 thous. somoni .
- Average monthly salary 207 somoni
- Fixed tariff for water supply 1m<sup>3</sup> of water for irrigation 1,5 diram (without VAT tax)
- Total yearly service cost on water supply for irrigation in 2009 83,3 mln. somoni
- Fixed tariff per 1kwt/hour electricity for pump stations including vegetation period 5,7 dirams, 1,5 dirams.

## Tariffs for water supply services, according to regulation of Ministry of Trade and Economical Development Republic of Tajikistan dated may 29 2009 under # 8

Name of crops	Average norm of consumption m3/ha	Service cost per 1 m3 water (diram)	Water supply service cost per 1 ha (somon), without VAT
Cotton	10000	1.5	150
Winter crops	2200	1.5	33
Maize for crops 2-harvest	7800	1.5	117
rice	37000	1.5	440
vegetable	12000	1.5	180
Lucerne	12500	1.5	188
gardens	9000	1.5	100
potatoes	6500	1.5	100
cucurbitaceous	5000	1.5	75
Maize for crops 1-harvest	9000	1.5	135
Maize for silo 2-harvest	3000	1.5	45

Remark:- for using not linked with land irrigation per 1 m3 2,45 diram;  
 - for above-standard diversion will be applied increased coefficient  
 - 1,2, but for unauthorized diversion - 3.

**Tariffs for water supply services , according to Regulation Tariffs for water supply services, according to regulation of Ministry of Trade and Economical Development Republic of Tajikistan, dated May 2008 under # 17**

<b>№№</b>	<b>Name consumers</b>	<b>Unit</b>	<b>Service cost, without VAT</b>
1	For consumers not linked with land irrigation per 1 m <sup>3</sup>	diram	2,45
2	For land irrigation ( not depending from the form ownership) per 1 m <sup>3</sup>	diram	1,5
3	for irrigation in cascade pump stations for the districts Zafarabad, B.Gafurov, Asht, Mascha, D.Rasulov & Spitamen (except OAO APK «Guliston»)	diram	2,39
4	For OAO Apk «Guliston» in Spitomen district per 1 m <sup>3</sup>	diram	1,5

**Seasonal tariffs for electric power for the separate consumers, according to regulation of Government Republic of Tajikistan dated May19, 2010 under # 259**

№	Electric power	In spring-summer period ( fr May 1 till September 30 )	In autumn-winter period (fr October 1 till April 30)
		Diram per 1 kwt/hour, including VAT	
1.	For GUP « Tajik Aluminum Company»	5,0	8,2
2.	For water pipeline pumps & pumping irrigation of pumping stations	1,5	5,7

However, despite of taken measures the situation in water economic branch of Republic continues to remain critical. The process of reforming of this important branch, unfortunately, was tightened. Operation extremely power inputs objects of a water management (pump stations) with shabby pressure head pipelines manage are very expensive. Capital construction financing, modernization and branch reequipment keeps the old mechanism, allocated means in tens times less than it is necessary.

## **Financial condition of the Ministry as of 01.06.2010**

<b>№ п/п</b>	<b>NAME OF DEBTS</b>		<b>Amount (thousand somoni)</b>
<b>1</b>	<b>Accounts receivable</b>	<b>total</b>	<b>221757,0</b>
		<b>Including the debts of agricultural</b>	<b>183247,6</b>
<b>2</b>	<b>Account payable</b>	<b>total</b>	<b>256980,6</b>
		<b>On salary</b>	<b>6768,4</b>
		<b>On electric power</b>	<b>131437,0</b>
		<b>Fund of population social protection</b>	<b>10527,0</b>
		<b>taxes</b>	<b>46163,0</b>
<b>3</b>	<b>On credits (from banks, other financial organizations</b>	<b>total</b>	<b>3281,1</b>
		<b>From banks</b>	<b>2602,1</b>
		<b>other financial organizations</b>	<b>679,0</b>



It is necessary to note, shortage of money from annual receipt for services of water giving for repair and restoration of intereconomic systems of an irrigation. Especially it influences strategic objects, as the Dangarinsky tunnel, duckers Shurchasoj, Ishmasoj, Lojkasoj, the Vahshsky main channel, the Big Gissarsky channel and cascade pump stations.

Annually for carrying out it is repair - a recovery work on these constructions it is necessary for 55 million somoni.

# Major factors which have led to deterioration of a condition of land improvement and a water management, are:

- A tightening branch reforming
- Problems in administration managerial control by water resources
- Insufficient base of regulatory legal acts,
- High level of administrative barriers
- Physical and an obsolescence of buildings, constructions and objects of branch, out-of-date irrigational system
- An acute shortage of techniques, cars and mechanisms;
- Insufficient financing of branch;
- Low level of a collecting of payment for water giving services
- Neediness of branch of highly-skilled personnel;
- Large debtor and creditor debts. Growth of debts of agriculture before branch, on 6/1/2010 of year it makes **183,2 million somoni**

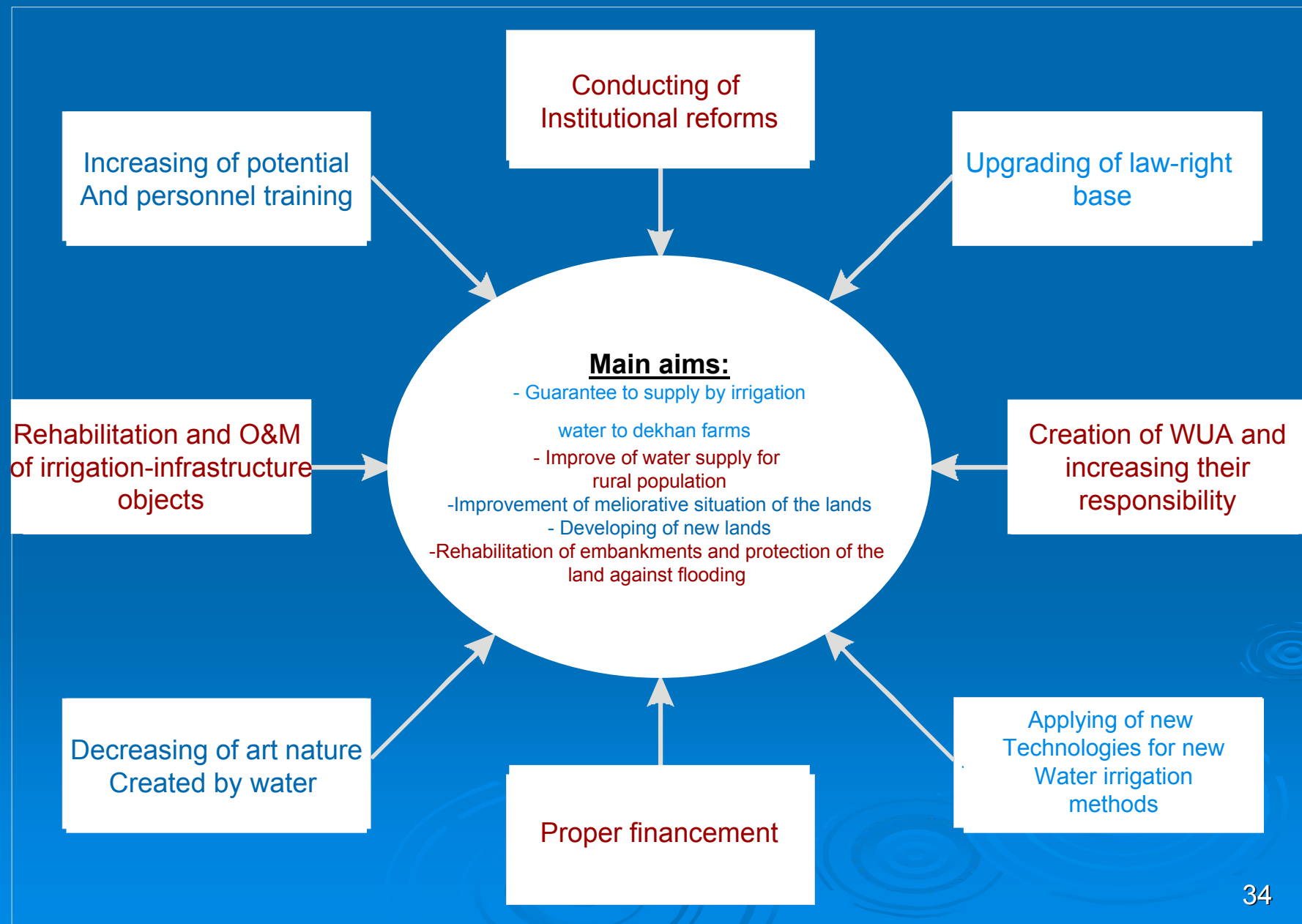
## ***The major problems of the branch***

It is possible to recognize developed control system of a water management as a whole satisfactory, however in present conditions demands serious change. A vital issue remains mutual relations between dekhans economy with Associations dekhan economy and Associations of water users. Not up to the mark there is a legal study of contracts, default of contractual relations between suppliers and consumers of water economic services is everywhere supposed. Work of workers is insufficiently stimulated, the average wages in branch make only 207 somoni, and that it from for non-payments of services by months is not paid (debts for the salary for June, 1st, 2010 makes 6,7 million somoni).

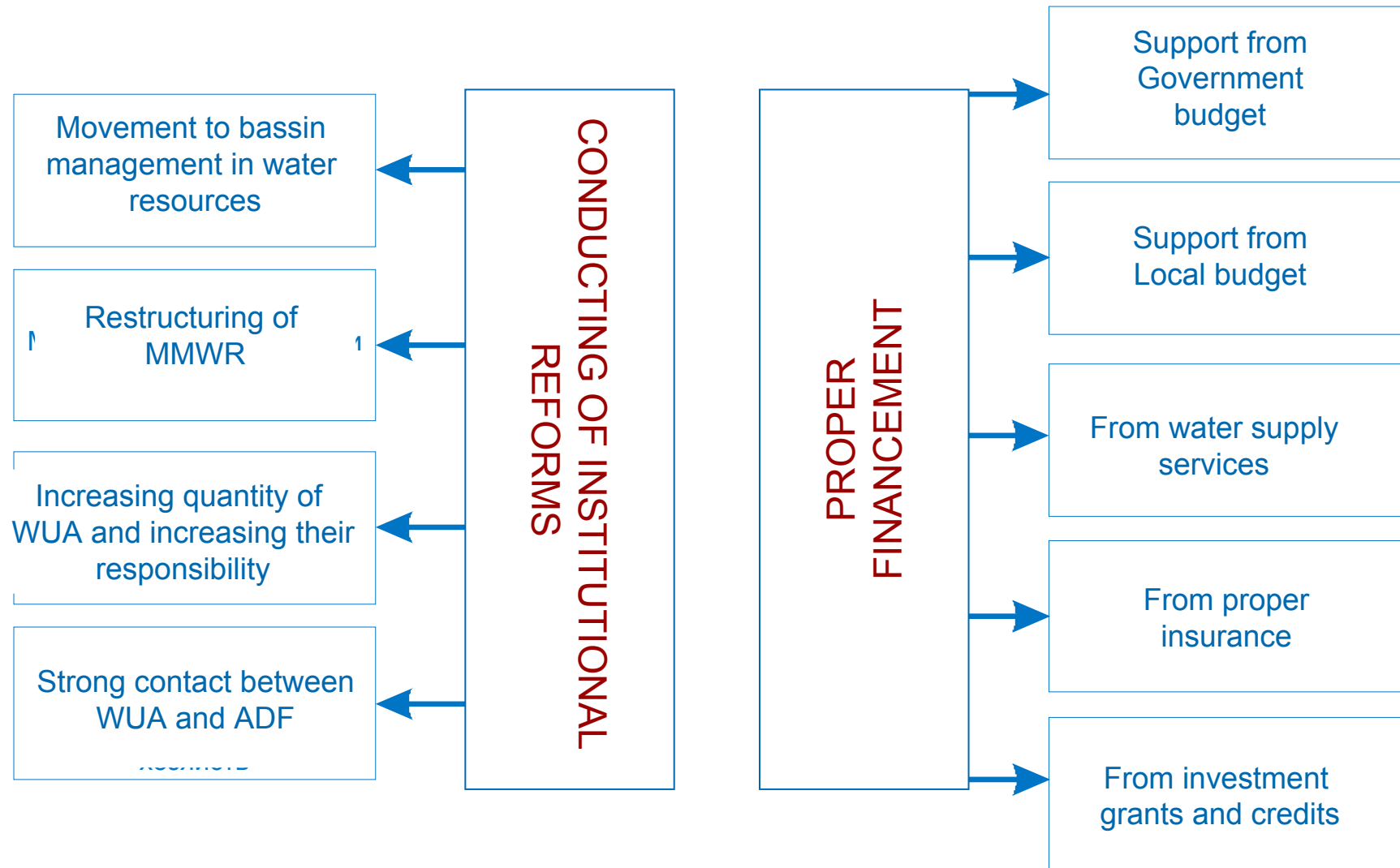
## ***The major problems of the branch***

- In transitive period on the market relation, the control system of water resources is gradually translated on a self-support principle. However because of imperfection of economic mechanisms regulating the relation between state structures problems in sphere of payment for water giving services arise suppliers of water and land users. The acute shortage of financial resources on the maintenance and operation of irrigating and drainage systems is as a result felt that physical deterioration of the core the equipment and hydraulic engineering constructions in the country on the average exceeds 50-60 %.
- The present situation demands perfection in water management structure. In this plan experts offer transition on bassin water resources management. For realization of the planned actions economic support of the Government of Republic Tajikistan and the international donors is required.
- The irrigating, collector-drainage network, pump stations that as a result of reorganization of the agricultural enterprises and the organizations remained ownerless, it is necessary under the decision enforcement authorities on places to transfer to balance WUA;
- For repair and restoration of intraeconomic systems of an irrigation allocation WUA in a year not less than 10 million somoni and maintenance with necessary mechanisms is necessary.

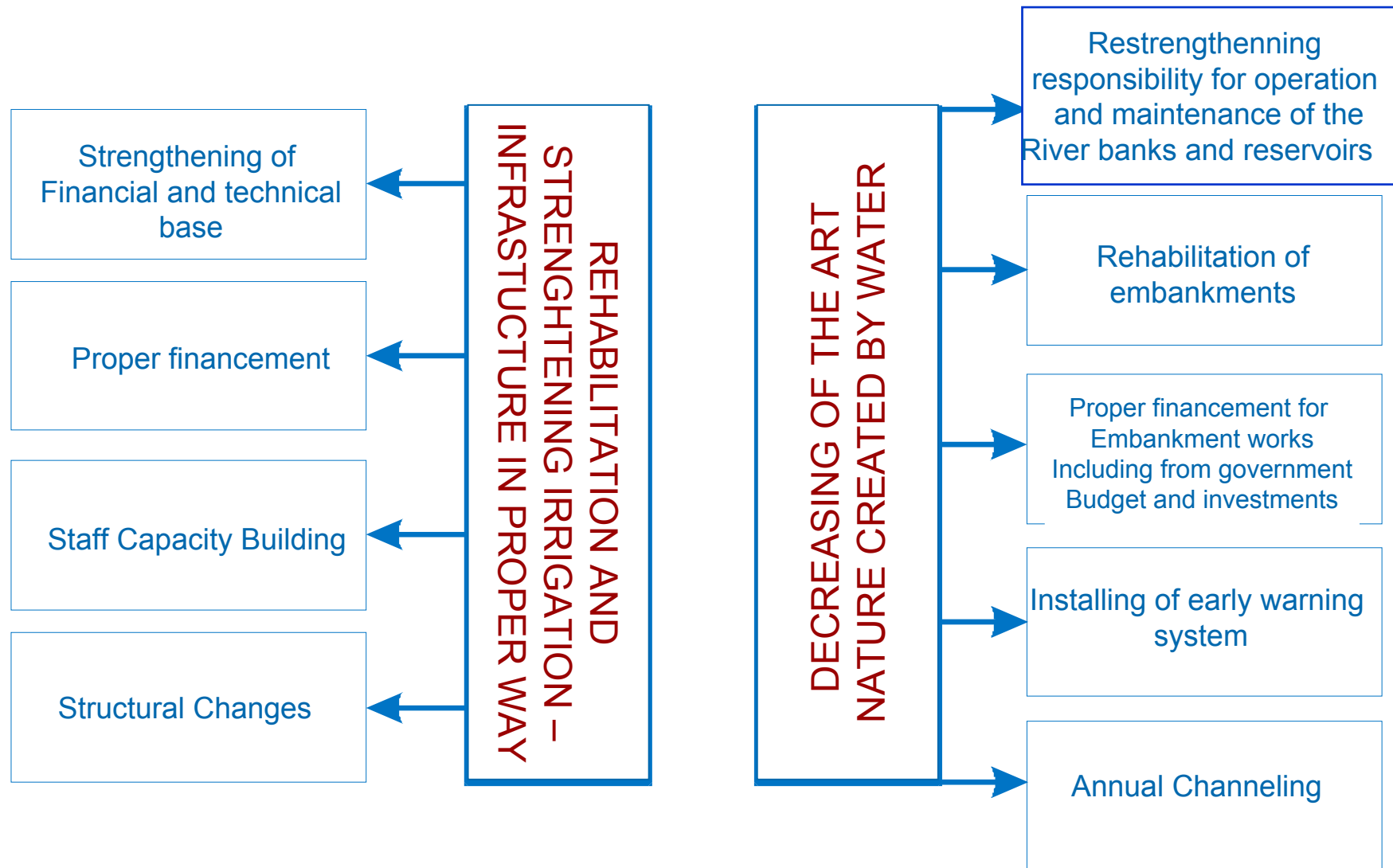
# Reforming of water management



# Reforming of water management



# Reforming of water management





## ***Reforming of water management***

The main objective of carrying out of reform is transfer of a part of management of irrigating system to water consumers for timely operation and conducting the stable economic mechanism of systems of land improvement.

- Creation of bassin managements and with their help carrying out of operation of the basic irrigating systems;
- Expansion of responsibility of WUA;
- Together with WUA and Association of dekhan farms (ADF) to solve all questions concerning irrigating systems and a collector-drainage network.
- Transition to the integrated water resources management;
- Definition of structure of water giving and fund raising from service of water giving from consumers;
- The water management governments as under the State Unitary Enterprise "Mirob" are representatives the Ministry of melioration and water resources in regions, having in the balance all intereconomic irrigational systems and constructions, together with local enforcement authorities promote in creation WUA.

## ***Major tasks of reform***

- Satisfaction of needs of consumers in irrigation water, development of the new lands, work on their meliorative improvement and rendering of services to water users on economically reasonable prices and tariffs, improvement of quality of rendered services
- Creation of conditions for development of market relations, transition to formation of well-founded contractual relations, development of the competitive environment, wide attraction of Associations of dekhan farms, Associations of water users for the organization and granting of services

## ***Major tasks of reform***

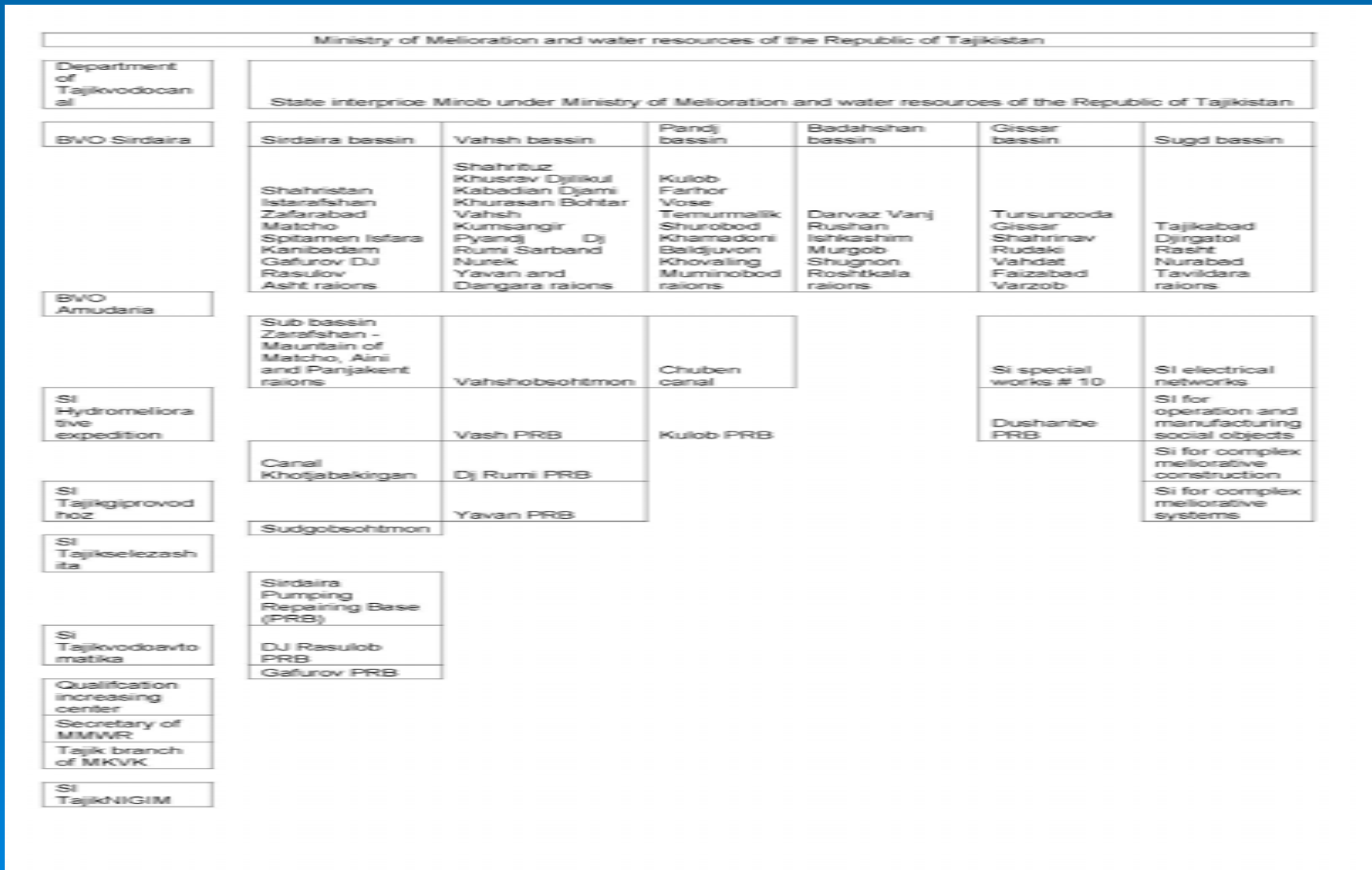
- Is standard-legal maintenance of activity of the enterprises and the branch organizations, their reduction in conformity with operating market relations;
- Creation of appropriate material base, restoration and updating of an infrastructure of a water management, technical re-equipment of the enterprises of a water management;
- Financial improvement of the enterprises of branch, restructuring, the decision of problems of the formed debts of the organizations, maintenance of a standard method of budgetary financing (grant) of rendered services;
- Transition to a mode of economical water delivery, regulation of submitted irrigated water by the account organization;

## ***Major tasks of reform***

- Development of an engineering infrastructure, restoration and maintenance of their reliability and stability of functioning by mobilization of own sources, the centralized capital investments, means of local budgets and attraction of internal and external investments on these purposes;
- Carrying out of scientific and technical researches concerning development of the new earths, land reclamations, operation and maintenance service of objects of a water management, working out and introductions of the new technologies directed on reduction of specific expenses of power and material resources.

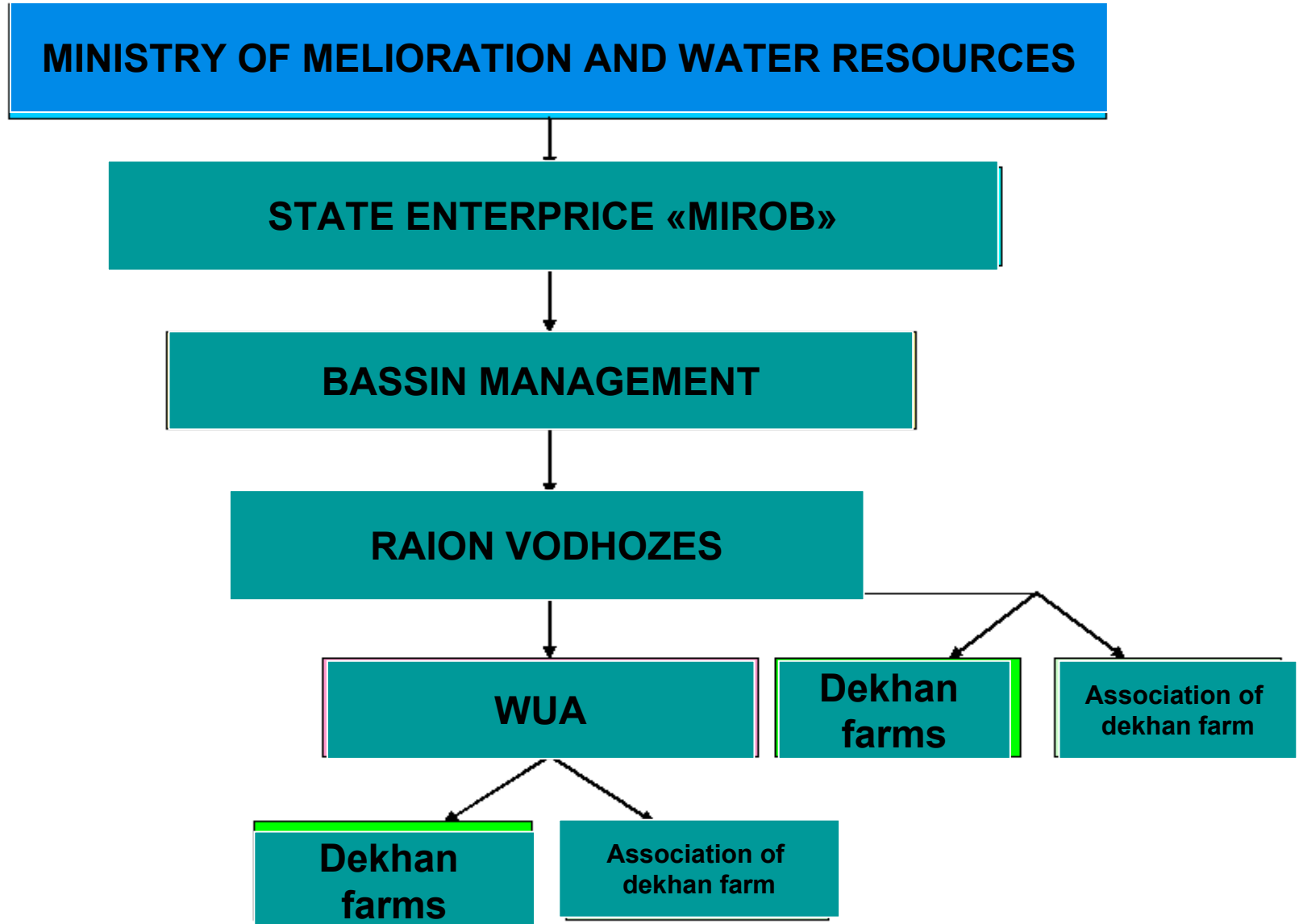
**Achievement of the purpose and realization of these problems, branch development is possible in the conditions of radical change of an economic mechanism (management structure, branch transition in a mode of break-even functioning).**

# New structure of Ministry

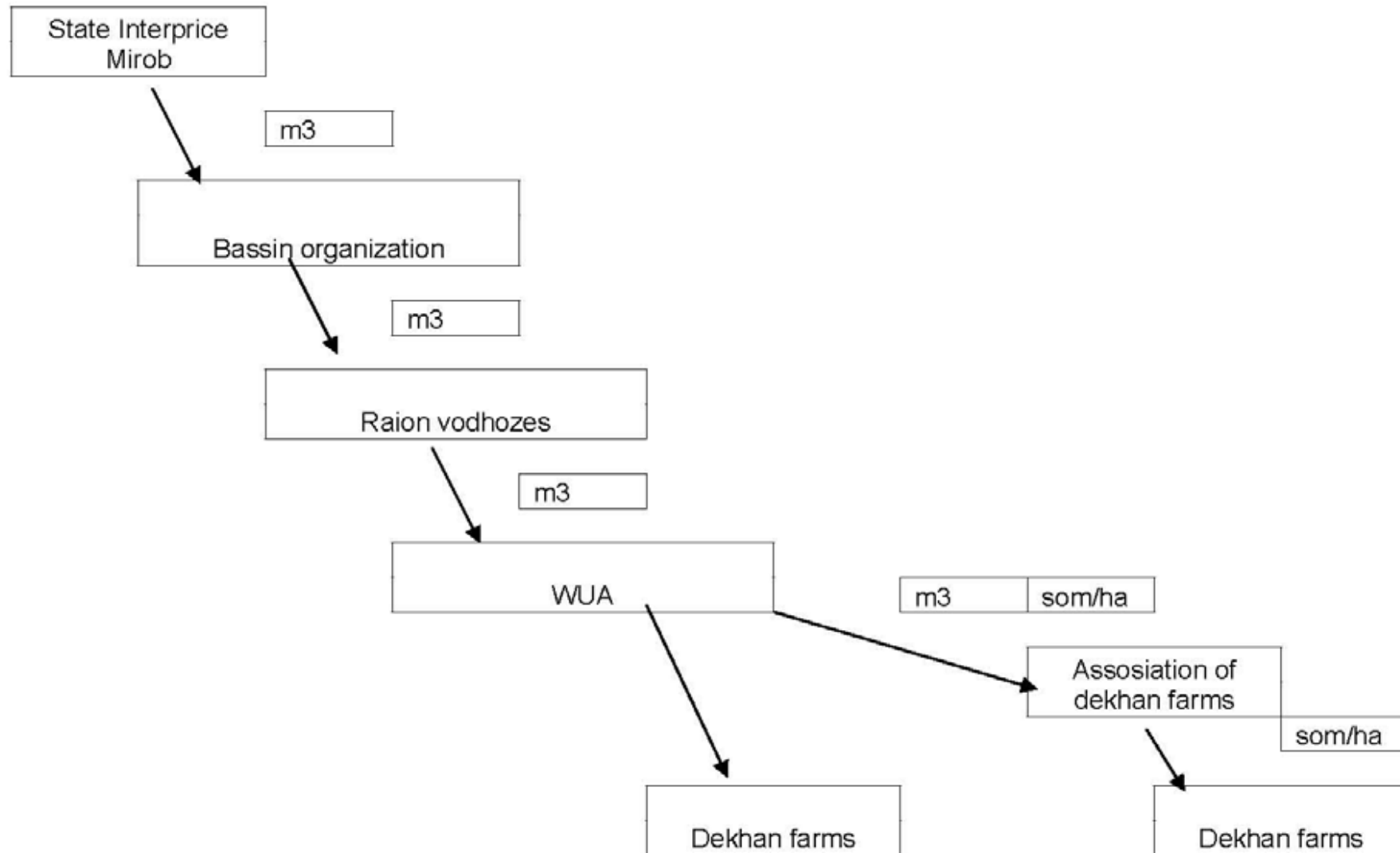


By movement to integrated management of water resources there will be 104 divisions under the ministry

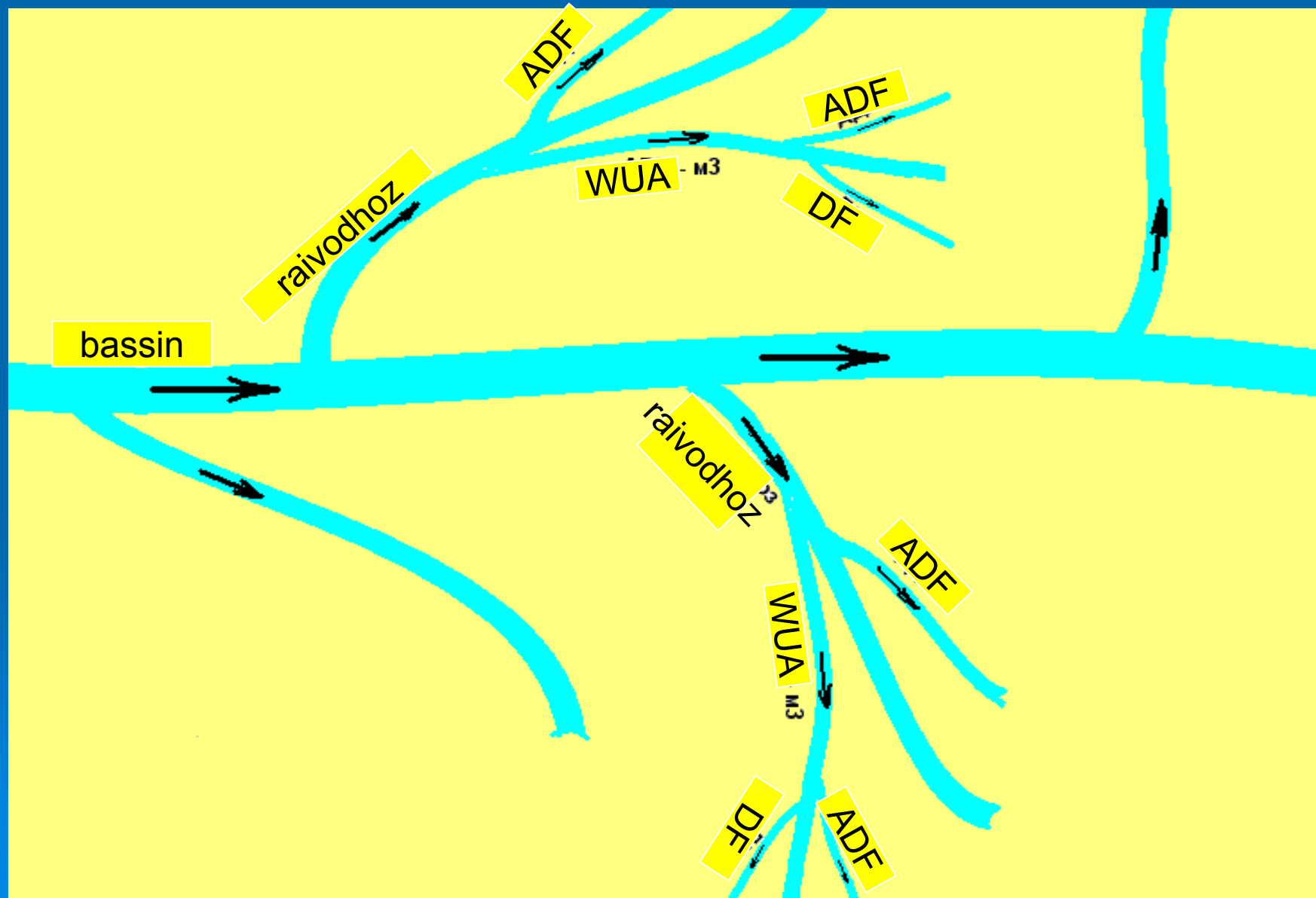
# *Offered scheme for services to supply irrigation water*



## Offered water counting scheme



# Offered optimal scheme for irrigation on transfer period





## **Reforming stages**

**1-st stage, 2010-2011 years.**

- Working out of the Program of development of a water management of Republic Tajikistan and mechanisms of realization of reform;
- Increase of investment appeal of system;
- Perfection of structure of management of branch;
- Carrying out of inventory of all objects, structures and branch communications;
- The analysis debtor and creditor debts of the enterprises of branch and the decision of questions on re-structuring and their repayment;
- Realization of a series of measures on financial improvement of the enterprises and the branch organizations;
- Rendering of active support to initiatives and aspiration dekhan to creation of Associations dekhan farms and Associations of water users. Organizational and methodical assistance to mass creation of Associations of water users;
- Attraction of means of donors for maintenance of carrying out of reform;
- Strengthening of material base, acquisition of techniques and mechanisms;
- Decrease in unproductive expenses for operation and repair of water economic objects;
- Preparation of offers on improvement of regulatory legal acts for maintenance of effective work of branch in new conditions;
- Perfection of system of contractual relations;
- Preparation and retraining of personnel;

## ***Reforming stages***

### **2-nd stage, starting from 2012.**

- The further development of reform on a basis formation organizational, administrative and market mechanisms for efficient control and operation of objects of a water management;
  - Increase in financing of branch at the expense of investments, own and target budgetary funds;
  - Working out of mechanisms of attraction and return short term and long-term investment credits for branch development;
  - Creation of the centralized fund on support and development of water economic objects;
  - Mass installation of devices and mechanisms of the account of a water consumption for consumers;
  - Establishment of the raised tariffs for rendering of services in delivery of volumes of water above permitted standard, and also differentiation of payment depending on quality and quantity are rendered services;
  - Working out and introduction of systems of insurance in water economic branch;
- Preparation and retraining of personnel;

**THANK YOU FOR YOUR ATTENTION!**