

Assessment of reclamation efficiency and irrigation water expenses per agricultural production unit
(direction 2: «Regulation of water-salt regime and ecological-reclamation processes management
on background of drainage, irrigation and leaching (vertical drainage)»)

Plot index	Soil-climatic zone	water allowance	Agricultural crop	Data type	Water supply, m ³ /ha per year		Drainage modulus,	Soil 0-1 m layer salinity, %, ha or t/ha	Yield, c/ha	Yield increase (+) or decrease (-)	Irrig. water expenses per yield unit, m ³ /c	Irrig. water productivity at field level, kg/m ³	
					net	gross						experiment	FAO recommend.
UZBEKISTAN													
02.04	Ц-II-Б	V	cotton	initial	8950	9850	0.057	90 % saline	22	+12(55)	406	0.245	0.4-0.6
				achieved	7190	8200	0.217	90 % NS	37	194	0.515		
02.17	Ц-II-A	V	cotton	initial	6770	9030	0.13	-	27	+5(19)	250	0.399	0.4-0.6
				achieved	6690	8920	0.24	-	32	210	0.478		
02.18	Ц-II-Б	V	cotton	initial achieved	5300	5840	0.04	-	12.4	+9(73)	470	0.232	0.4-0.6
02.19	Ц-II-Б	V	cotton	initial	6970	9300	0.04	SS=70%	5	+20(400)	1860	0.071	0.4-0.6
				achieved	6970	9300	0.15	MS=30% WS=65% NS=35%	25		372	0.360	
02.24	Ц-II-A	V	cotton	initial	8100	8910	0.14	WS+MS=80%	25	+10(40)	356	0.309	0.4-0.6
				achieved	7500	8250	0.22	NS=20% NS=60% MS=40%	35		235	0.466	
02.27	Ц-II-Б	V	cotton	initial	5200	7020	0.042	SS=66%	10	+20(200)	702	0.192	0.4-0.6
				achieved	7000	9100	0.14	NS=31% SS=9% NS=91%	30		0.420		
02.30	Ц-II-Б	IV	cotton	initial	6540	9340	0.127	SS+MS=24%	22.4	-4.9(22)	571	0.342	0.4-0.6

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					net	gross						experiment	FAO recommend.
				achieved	5475	7500	0.048	WS=76% SS=60% WS=40%	17.5		428	0.319	
02.31	Ц-II-A	IV	cotton	initial	6200	7750	0.019	MS+SS=90%	14	+16(114)	554	0.225	0.4-0.6
				achieved	6110	9400	0.15	NS WS=94%	30		313	0.490	
02.33	Ц-II-A	V	cotton	initial	7800	9360	0.12	NS=92% WS=8%	27	+8(30)	347	0.346	0.4-0.6
				achieved	7770	9320	0.18	NS=100%	35		266	0.450	
02.36	Ц-II-Б	V	cotton	initial	6000	7500	0.04	SS=43%	15	+15(100)	500	0.250	0.4-0.6
				achieved	6750	9000	0.20	SS=4%	30		300	0.444	
02.37	Ц-II-Б	V	cotton	initial	6000	6300	0.05	MS SS=70%	14	+14(100)	450	0.233	0.4-0.6
				achieved	6900	9200	0.16	NS WS=80%					
02.40	Ц-II-Б	V	cotton	initial	5140	6850	0.04	MS SS=90%	12.7	+9.2(72)	539	0.247	0.4-0.6
				achieved	6450	8600	0.073	NS WS=95%	21.9		393	0.340	
OBJECTS OF UZBEKISTAN IN KAZAKHSTAN													
02.11	Ц-II-Б	IV	cotton	initial	7500	9375	0.082	MS SS=12% WS=88%	36	-9(25)	260	0.480	0.4-0.6
				achieved	6470	8620	0.048	WS=61% MS SS=39%	27		239	0.418	
02.12	Ц-II-Б	V	cotton	initial	5500	7150	0.05	75% saline	11	+21(190)	650	0.200	0.4-0.6
				achieved	7500	10050	0.14	NS=90%	32		345	0.462	
02.13	Ц-II-Б	V	cotton	initial	7880	11250	0.05	WS=30%	16		703	0.202	

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					net	gross						experiment	FAO recommend.
								MS		+12.1(76)			0.4-0.6
				achieved	7900	11280	0.15	SS=70%	28.1		401	0.356	
								NS					
								WS=80%					
								MS=20%					
02.14	Ц-П-Б	V	cotton	initial	6800	9700	0.05	-	15.7	+8.5(54)	617	0.230	0.4-0.6
				achieved	6700	9570	0.11	-	24.2		395	0.360	
02.7	Ц-П-Б	V	cotton	initial	8400	10500	0.03	70% saline	24	+8(33)	437	0.285	0.4-0.6
				achieved	7800	10400	0.16	NS=94%	32		351	0.410	
02.9	Ц-П-Б	V	cotton	initial	8800	10120	0.04	70% saline	19	+19(100)	532	0.216	0.4-0.6
				achieved	9000	10350	0.14	NS=75%	38		272	0.422	
02.10	Ц-1-A1	IV	cotton	initial	6860	9380	0.07-0.1	WS+MS=	24		409	0.349	
								95%		+8(33)			0.4-0.6
				achieved	6920	9460	0.14-0.20	NS=94%	32		296	0.462	
KAZAKHSTAN													
02.1	С-П-А1	V	cotton	initial	7500	10000	0.061	MS=30%	15		666	0.200	
								NS=70%		+10(67)			0.4-0.6
				achieved	5625	7500	0.05	NS=80%	25		300	0.444	
								WS=20%					
02.2	С-П-А1	IV	cotton	initial	5500	6500	0.017	NS=70%	12		540	0.218	
								MS=30%		+13(108)			0.4-0.6
				achieved	6070	8090	0.017	NS=100%	25		372	0.418	
KYRGYZSTAN													
02.1	Ц-П-Б	IV	lucerne	initial	5400	6000	0.007	65t/ha	131	+58(44)	46	2.18	1.5-2.0
				achieved	7020	8380	0.013	35 t/ha	189		44	2.25	
TADJIKISTAN													

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					net	gross						experiment	FAO recommend.
02.1	Ю-1-Г	IV	cotton	initial	-	13240	0.52	SS=91%	13	+6.3(48)	1018	0.09	0.4-0.6
				achieved	-	10522	0.28	SS=20%	19.3		545	0.183	
			lucerne	initial	-	13240	0.52	SS=91%	38	+51(134)	348	0.290	
				achieved	-	10522	0.28	SS=20%	89		118	0.845	

Abbreviations: NS - non-saline; WS - weakly saline; MS- medium saline; SS - strongly saline.