社会開発調査部報告書

No. 22

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
WATERSHED MANAGEMENT DEPUTY (WMD)
MINISTRY OF JIHAD AGRICULTURE
ISLAMIC REPUBLIC OF IRAN

THE STUDY
ON
WATERSHED MANAGEMENT PLAN FOR KAROON RIVER
IN
THE ISLAMIC REPUBLIC OF IRAN

FINAL REPORT
INVENTORY

JICA LIBRARY
J1169226[6]

APRIL 2002

SANYU CONSULTANTS INC.
INA CORPORATION

SSS
JR
02-54

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
WATERSHED MANAGEMENT DEPUTY (WMD)
MINISTRY OF JIHAD AGRICULTURE
ISLAMIC REPUBLIC OF IRAN

THE STUDY
ON
WATERSHED MANAGEMENT PLAN
FOR
KAROON RIVER
IN
THE ISLAMIC REPUBLIC OF IRAN

FINAL REPORT
(INVENTORY)

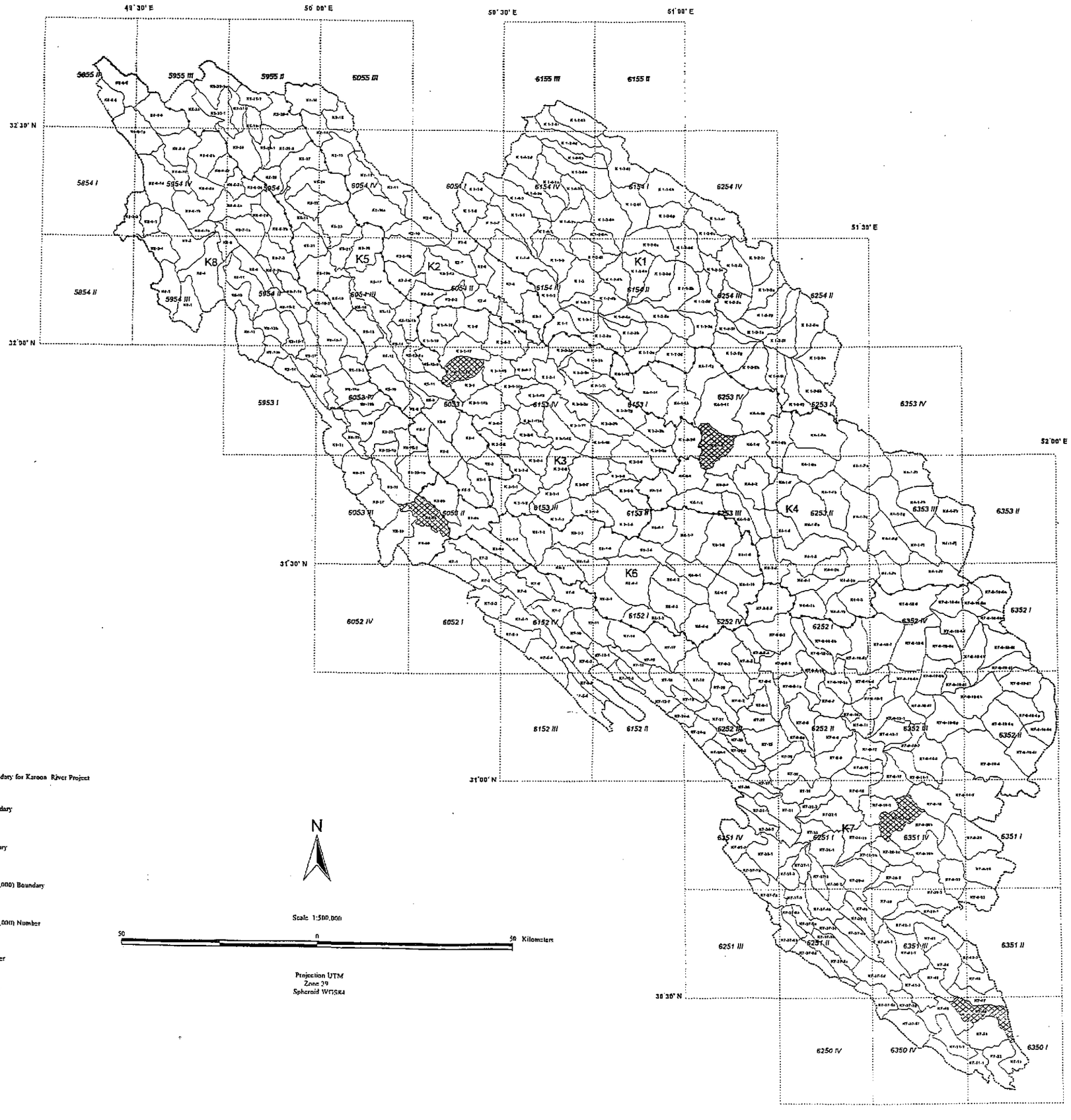
APRIL 2002

SANYU CONSULTANTS INC
INA CORPORATION

1169226[6]

マイクロフィルム作成

Main Basins and Sub-Basins of Karoon River



Legend:

- Study Area Boundary for Karoon River Project
- Main Basin Boundary
- Sub-basin Boundary
- TOPO Map (1:50,000) Boundary
- *6153 II* — TOPO Map (1:50,000) Number
- K4 — Main Basin Number
- K4-1-7-1 — Sub-basin Number

N

Scale 1:500,000

50 0 50 Kilometers

Projection UTM
Zone 39
Spheroid WGS84

CONTENTS

SURVEY METHODOLOGY, PURPOSE AND EFFECTIVE USE OF INVENTORY

Inventory survey has been carried out to collect necessary information of various categories of inventory for 455 sub-basins in the Study Area. Survey methodology, purpose and effective use of inventory are explained.

Survey Methodology, Purpose and Effective Use of Inventory Survey

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
A. General Information 1) Name of Province 2) Name of Township 3) Name of Villages 4) Name of Drained Tributary 5) Locating Coordination 6) Related 1:50,000 map 7) Catchment Area	**Purpose:** Definition of general conditions of sub-basins. **Survey Methodology:** Collecting information on the map of scale 1:50,000 and 1:25,000.	1) Recognition of general conditions of sub-basin. 2) Base figures of other inventory information.
B.1 Meteorology 1) Catchment Area (km^2) 2) Mean Annual Rainfall (mm) 3) Mean Maximum Daily Rainfall (mm) 4) Mean Maximum Temperature (℃) 5) Mean Annual Temperature (℃) 6) Mean Minimum Temperature (℃) 7) Annual Evaporation (mm)	**Purpose:** To identify characteristics of meteorology **Survey Methodology:** Collection of meteorological data	1) Recognition of general conditions of meteorology
B.2 Hydrology/Water use 1) Annual Rainfall (1000 m^3) 2) Annual Runoff (1000 m^3) 3) Annual Discharge Depth (mm/year) 4) Mean Maximum Discharge (mm/day) 5) Annual Discharge Ratio (%) 6) Water Use for Irrigation (1000 m^3) 7) Water Use for Domestic Water (1000 m^3)	**Purpose:** To identify characteristics of hydrology and water use **Survey Methodology:** Collection of hydrological and water use data	1) Recognition of general conditions of hydrology 2) To evaluate surface water resource
C. Flood/Debris Flow Damage 1) Date, Cause, Location 2) Previous Big Floods 3) Total Damage 4) Damage of Human Beings 5) Damage of Livestock 6) Damage of Agriculture 7) Damage of Houses 8) Damage of Road 9) Damage of Other Infrastructures	**Purpose:** To grasp general situation of flood. **Survey Methodology:** 1) Collection of flood records from the Flood Investigation Group of JIHAD. 2) Identification of flood records through site investigation.	1) To evaluate the degree of flood damage. 2) To select the priority areas where appropriate countermeasures are required.

Survey Methodology, Purpose and Effective Use of Inventory Survey

(continued)

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
D. Landslide 1)Town, District, Village 2)Location Coordination 3)Date of Movement 4)Kind of Movement 5)Area 6)Main Cause 7)Lithology of Mass Movement 8)Damage 9)Classification of Risk	**Purpose:** To grasp general situation of landslide. **Survey Methodology:** 1) Collection of landslide records from the Landslide Investigation Group of JIHAD. 2) Confirmation of records by site investigation and aerial photographs.	1) To know the priority areas where the geographical and geological features are to be investigated for preventing landslide. 2) To know possibility of forecast of landslide.
E. Topography 1)Elevation (Max. & Min.) 2)Mountain area (%) 3)Hilly area (%) 4)Riverside terrace (%) 5)Alluvial flat plain (%) 6)Large scale fan (%) 7)Special geological features (%)	**Purpose:** To grasp topographical features and geology in each sub-basin. **Survey Methodology:** 1) Analysis and definition of topography and geology on topographical maps, geological maps and aerial photos. 2) Field check and confirmation.	1) To be utilized as basic reference material for various purposes as: - Topographical and geological information for recording disasters as flood, landslide, debris flow and erosion. - Topographical and geological information for surveying and investigating land use and land capability.
F. Land Use 1)Irrigated farmland 2)Non irrigated (dry) farmland 3)Forest 4)Forest with inter-cropping 5)Rock 6)Others	**Purpose:** To grasp present land use for formulation of future land use. **Survey Methodology:** Present land use is investigated basically based on aerial photos, satellite images and relevant data together with additional field confirmation. In this study, most part of the study area refers to the previous studies which were already prepared by JIHAD and MOA. Except tow areas, upper part of K7 and lower part of K8, where no previous study was made, present land use was digitized.	1) To know the present land use and its problems by sub-basins. 2) To formulation of future land use plan by sub-basins. **Problems:** A part of K7 and K8 is not covered. **Future Improvement:** Above blank area to be covered.
G. Land Capability Weighted Land Capability by following land types and Land Capability Index. 1)Mountainous lands 2)Hilly lands 3)Plateau and upper terraces 4)Piedmont plains 5)Alluvial plains 6)Lowlands 7)Floodplains 8)Gravelly colluvial fans 9)Gravelly river fans 10) Complexes 11) River bed 12) Water and Reservoirs 13) Cities	**Purpose:** To know productivity and potential utilization of lands in accordance with topography (elevation, slope etc.), geology, soil (depth, texture etc.), vegetation and erosion conditions and limitations. **Survey Methodology:** Land capability is investigated based on actual field survey on soil, vegetation, erosion and land use as well as aerial photos, satellite images and relevant data. In this study, most part of the study area refers to the previous studies which were already prepared by JIHAD and MOA. Upper part of K7 Basin, where no previous study was made, was studied on its land capability referring to 1:40,000 aerial photos, Spot image, 1:50,000 and 1:25,000 topo maps with field reconnaissance survey due to limitation of study period.	1) To know the limitations of topography, soil and vegetation for land utilization by sub-basins. 2) To evaluate potential of land utilization for development by sub-basins. 3) To rationalize the development of each sub-basin taking potentials into consideration not only its potential but also surroundings.
H. Water and Water Conservation Facilities 1)Debris Barrages 2)Slope Stabilization 3)Contour Bands 4)Water Ways 5)Sediment Traps 6)Revegetation 7)Afforestation 8)Contour Tillage	**Purpose:** To know present facility level of soil and water conservation. **Survey Methodology:** Survey has to be carried out based on information of the Provincial Organizations of JIHAD. However, form of information is not integrated so that accuracy of information is varied by organizations. It is necessary to integrate information form of conservation works. In this study, information is not integrated due to limitation of compiling time.	1) To know present condition of facility provision for soil and water conservation. 2) To know additional facilities for soil and water conservation.

Survey Methodology, Purpose and Effective Use of Inventory Survey

(continued)

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
I. Arial Erosion Classes 1) Trace (km^2) 2) Trace-Low (km^2) 3) Low (km^2) 4) Low-fair (km^2) 5) Fair (km^2) 6) Fair-High (km^2) 7) High (km^2) 8) High-Severe (km^2) 9) Severe (km^2)	**Purpose:** To know erosion classes by sub-basins quantitatively. **Survey Methodology:** Erosion classes refer to the previous studies which studied erosion class by PSIAC Method. However, a part of K7 and K8 basins, where previous studies were not made, was preliminarily investigated by this study using limited available data such as aerial photos, topo maps, and geological map of 1:100,000 scale.	1) To know erosion rate by sub-basins quantitatively. 2) To prepare protection measures to the high erosion locations.
J.1 Population Characteristics 1) Rural population (family numbers) 2) Urban population (family numbers) 3) Family size 4) Population density 5) Active population 6) Unemployed population 7) Literacy rate (%)	**Purpose:** To know social conditions by sub-basins quantitatively. **Survey Methodology:** 1)The whole inventory items of the population characteristics are estimated based on the Population and Housing Census 1375 (1996), issued by Statistical Center of Iran, and the data of Rural Research Center, Ministry of Jihad-e Sazandegi. 2)Estimated population has been evaluated by ratio of area in each sub-basin.	**Usage:** 1)To know human resource for watershed management by sub-basins. 2)To evaluate potential of human resource for development by sub-basin. **Problems:** Lack of accurate population characteristics by sub-basin. **Future Improvement:** 1) Definition of villages by sub-basins. 2) To definite accurate Population characteristics by sub-basins. 3) To substitute the right figure for the mentioned one.
J.2 Tribes 1) Rural population (family numbers) 2) Nomad (Summer period) - Population (Ratio to rural population) - Family number (Ratio to rural family number) 3) Nomad (Winter period) - Population (Ratio to rural population) - Family number (Ratio to rural family number)	**Purpose:** To know social conditions of nomadic tribes by sub-basins quantitatively. **Survey Methodology:** 1)Rural population shall be adopted an estimated rural population of K1. 2)The inventory items of the tribes shall be estimated by the detail data of the Annual Socioeconomic Report of Nomadic Tribes, issued by Plan and Budget Organization and Ministry of Jihad-e Sazandegi. 3)Tribal population by seasonal period shall be evaluated in each sub-basin.	**Usage:** 1) To know human resource for watershed management by sub-basins. 2) To evaluate potential of Human resource for Development by sub-basin. 3) To grasp nomadic migration by sub-basin. **Problems:** 1)Lack of accurate distribution of nomads in each sub-basin. 2)Lack of seasonal migration of nomads in each sub-basin. **Future Improvement:** 1)To definite migration and settlement of nomads in each sub-basin. 2)To definite accurate tribal population characteristics and its distribution by sub-basin.

Survey Methodology, Purpose and Effective Use of Inventory Survey

(continued)

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
J.3 Education 1) Primary School - School numbers - School-aged children - Enrolled 6-10 years pupils - Net enrollment ratio (boys) - Net enrollment ratio (girls) - Number of teachers 2) Adult Education (Literacy class attendants) - Male - Female	**Purpose:** To know educational conditions for human development and regional development by sub-basins quantitatively. **Survey Methodology:** 1)The items of primary school as basic education shall be adopted the data of the Annual Statistics of Education. And the items shall be evaluated in each sub-basin. 2)The items of adult education shall be adopted the data of Literacy Movement Organization.	**Usage:** 1)To know human resource for watershed management by sub-basins. 2)To evaluate potential of human resource for development by sub-basin. 3)To grasp human development capacity for watershed management by sub-basins. **Problems:** 1)Statistical information on the educational concerns could not obtained. 2)Consequently, the inventory items are blanks. **Future Improvement:** 1)Based on the statistics of education, the items should be fill in.
J.3 Human Development Index (HDI) 1) Life expectancy at birth (year) 2) Adult literacy (%) 3) Combined 1st, 2nd, 3rd level gross enrollment ratio (%) 4) Real consumption expenditure per capita (1000 Rials) 5) Adjusted real consumption expenditure per capita (1000 Rials) 6) Life expectancy index 7) Education index 8) Consumption expenditure index 9) Human development index (HDI) value	**Purpose:** To know the average achievements in the basins in three basic dimensions of human development-longevity, knowledge and a decent standard of living. **Survey Methodology:** 1)Collection of the statistical data to measure the Human Development Index from Plan and Budget Organization and UNDP, and also related agencies and organizations. 2)HDI shall be measured in consultation with mentioned agencies and organizations. 3)The HDI contains three variables: life expectancy, educational attainment (adult literacy and combined primary, secondary and tertiary enrolment) and real consumption expenditure per capita (1000Rials). 4)Due to no data for calculation of HDI in each sub-basin, The present HDI is adopted the provincial HDI as follows: - K1: Chaharmahal va Bakhtiyari province. - K2: Chaharmahal va Bakhtiyari province. - K3: Chaharmahal va Bakhtiyari province. - K4: Average figure of Chaharmahal va Bakhtiyari and Esfahan provinces. - K5: Chaharmahal va Bakhtiyari province. - K6: Chaharmahal va Bakhtiyari province. - K7: Average figure of Esfahan and Kohgiluyeh va Boyerahmad provinces. - K8: Khuzestan province.	**Usage:** 1)To know the basic capability to be needed for participate and contribute to the society in each sub-basin. 2)To know human development level for watershed management by sub-basins. 3)To know potential of human resource for development in each sub-basin. 4)To grasp the disparities of human development among sub-basins. **Problems:** 1)Collection of the detailed data could not done. 2)Cooperation of the relevant various agencies and organizations is not existed. **Future Improvement:** 1) Collection of the detail data to be measured in each sub-basin, from the followings: - related provincial offices - related district offices - related rural villages 2) Measurement of HDI shall be made in collaboration with Plan and Budget Organization (Central and Provincial) and experts of the relevant various agencies and organizations.

Survey Methodology, Purpose and Effective Use of Inventory Survey

(continued)

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
K.1 Agriculture 1) Farmers' population 2) Farmers' family numbers 3) Nomad population 4) Nomad family numbers 5) Irrigated area (farmland) 6) Dry farming area (farmland) 7) Fallow area (farmland) 8) Irrigated area (orchard) 9) Dry farming area (orchard) 10) Annual Income per farmer's family (1000 Rials)	**Purpose:** Definition of agricultural condition by sub-basins. **Survey Methodology:** 1) Population of farmers and nomadic tribes is adopted the population characteristics and the tribes. 2) Collection of agricultural data from Rural Research Center, Ministry of Jihad-e Sazandegi and Master Plan Reports related to the study area, MOA. (data include agricultural land of nomads) - Agricultural data: based on the Statistics of Agriculture 1372(1993) – area of agricultural land and orchard. - Master Plan Report, K1 to K6, K7 and K8: planted area, yield, prices and crop income. 3) The data of agricultural land and orchard are compiled by village basis, but the village basis data are not used in this study because some villages are not defined their location on the map. Rural district basis data, therefore, has been utilized in this study. Areas of rural district basis have been divided and given to each sub-basin in proportion to the ratio of area of each sub-basin. 4) Income per farmer's family is computed based on the above-mentioned data.(refer to K3)	**Usage:** 1)To recognize agricultural land and orchard in each sub-basin. 2)To recognize farming condition in each sub-basin. 3)To grasp agricultural land use in each sub-basin. 4)To identify income level in each sub-basin. 5)Base figures of economic condition. **Problems:** Lack of accurate agricultural condition such as irrigated area and dry farming area, planted area by crops and fruit in each sub-basin. **Future Improvement:** 1)To replace the present figures with correct one, after obtaining of correct figures. 2)Supplementary items on planted area by major crops.
K.2 Livestock 1) Sheep (farmer own) 2) Goat (farmer own) 3) Cow (farmer own) 4) Equine (farmer own) 5) Poultry (farmer own) 6) Sheep (Nomad own) 7) Goat (Nomad own) 8) Cow (Nomad own) 9) Equine (Nomad own) 10) Poultry (Nomad own)	**Purpose:** Definition of livestock condition by sub-basins. **Survey Methodology:** 1) Collection of data and information from provincial livestock offices and service centers. and Master Plan Report in the related basin of MOA. 2) Number of livestock is calculated based on the collected data. Estimated numbers of livestock have been evaluated by number of rural family in each sub-basin.	**Usage:** 1)To recognize number of livestock in each sub-basin. 2)To grasp livestock of nomadic tribes in each sub-basin. 3)Base figures of economic condition. **Problems:** 1)No data of breeds by livestock in each sub-basin. 2)Lack of livestock data by nomads and farmers in each sub-basin. 3)Lack of livestock data of nomads by seasonal period (summer and winter). **Future Improvement:** 1)Collection of the detail of livestock breeds in each sub-basin. 2)To replace the present figures with correct one after obtaining of the details. 3)Supplementary items on livestock by breeds.

Survey Methodology, Purpose and Effective Use of Inventory Survey

(continued)

Inventory Category and Inventory Items	Purpose and Methodology of Survey	Usage
K.3 Income Level 1) Agricultural income 2) Livestock income 3) Total income	**Purpose:** To grasp the economic condition of nomads and rural households in each sub-basin. **Survey Methodology:** 1)The income is assumed based on estimated crop net income and livestock net income which are adopted the Master Plan Report of the related area, MOA, due to lack of official statistic data on income and expenditure of rural households. 2)Agricultural income is estimated based on assumed typical crops and farmland area in each sub-basin. Alfalfa, wheat and grapes are considered as typical crops for irrigated farming, dry farming and orchard, respectively. Typical crops are adopted as the followings: - irrigated farming: alfalfa and vegetables - dry farming: wheat - *orchard: grapes* Net income per ha of typical crops is adopted the following value. Alfalfa – 222,975 Reals Vegetables – 90,078 Reals Wheat – 82,297 Reals Grapes – 304,640 Reals 3)Livestock income is estimated based on livestock number in each sub-basin. Livestock is assumed as sheep, goat and cow for income calculation. Net income per head by animals is adopted the following value. Sheep – 52,815 Reals Goat – 33,715 Reals Cow – 310,805 Reals 4)Farmland area and livestock number of each sub-basin are estimated in the agriculture and livestock inventory as mentioned in K1 and 2.	**Usage:** 1)To recognize agricultural and livestock income in each sub-basin. 2)Base figures of economic condition. **Problems:** 1)Lack of accurate data by farmers and nomads. 2)Lack of accurate agricultural and livestock data in each sub-basin. **Future Improvement:** 1)Collection of the detail data of agriculture and livestock in each sub-basin. 2)To replace the present figures with correct one after obtaining of the details. 3)Supplementary items of nomads' income.
L. Natural Vegetation and Environmental Reserve **L.1 Natural Vegetation** **L.2 Carrying Capacity** ***L.3 Natural Conservation Area*** 1)Protected Area 2)National Park 3)Wetland 4)Genetic Reserve 5)National Nature Monument	**Purpose:** 1) To identify the most dominant vegetation species, and reveal their area in each sub-basin 2) To know the condition, trend and carrying capacity of each vegetation species in each sub-basin 3) To know the area of environmental reserve and national park occurring in each sub-basin. **Survey Methodology:** 1) Collection of vegetation maps and materials - From the Forest and Range Organization of the Ministry of Jihad-e-Sazandegi - From the Ministry of Agriculture - From the Provincial Organizations. 2) Processing the collected maps and materials in GIS system and obtaining the results.	1) Preparing the vegetation map of the Study Area 2) Knowing the condition, trend and carrying capacity of vegetation species in each sub-basin 3) Knowing the exact location and boundary of environmental reserve in each sub basin
M. Grazing Situation 1)Present number of livestock 2)Capable number by grazing 3)Capable number by straw 4)Capable number by alfalfa 5)Total capable fed number 6)Ratio of over grazing	**Purpose:** To clarify over grazing situation in each sub-basin. **Survey Methodology:** 1) All data are obtained from this Inventory - Present livestock number is based on K.2. - Carrying capacity of grazing is based on L.2. - Carrying capacities of straw and alfalfa are calculated based on farmland area of K.1. 2) Over grazing situation is presented as the ratio of present livestock number to capable carrying capacity.	**Usage:** To know present over grazing situation. **Problems:** It is possible to know general situation, but not so accurate. **Future Improvement:** Inventory of K(agriculture and livestock) and L(vegetation) to be improved by future study.

Inventory of General Information

Legend of Inventory

(Map Reference-1:50,000)

Ref. No.	Map No.	Ref. No.	Map No.	Ref. No.	Map No.
1	5854 - I	26	6152 - I	51	6253 - III
2	5854 - II	27	6152 - II	52	6253 - IV
3	5855 - II	28	6152 - III	53	6254 - I
4	5953 - I	29	6152 - IV	54	6254 - II
5	5953 - II	30	6153 - I	55	6254 - III
6	5953 - IV	31	6153 - II	56	6254 - IV
7	5954 - I	32	6153 - III	57	6350 - I
8	5954 - II	33	6153 - IV	58	6350 - II
9	5954 - III	34	6154 - I	59	6350 - IV
10	5954 - IV	35	6154 - II	60	6351 - I
11	5955 - II	36	6154 - III	61	6351 - II
12	5955 - III	37	6154 - IV	62	6351 - III
13	6052 - I	38	6155 - II	63	6351 - IV
14	6052 - IV	39	6155 - III	64	6352 - I
15	6053 - I	40	6250 - I	65	6352 - II
16	6053 - II	41	6251 - I	66	6352 - III
17	6053 - III	42	6251 - II	67	6352 - IV
18	6053 - IV	43	6251 - III	68	6353 - I
19	6054 - I	44	6251 - IV	69	6353 - II
20	6054 - II	45	6252 - I	70	6353 - III
21	6054 - III	46	6252 - II	71	6353 - IV
22	6054 - IV	47	6252 - III	72	6354 - II
23	6055- II	48	6252 - IV	73	6354 - III
24	6055 - III	49	6253 - I	74	6452 - III
25	6151 - I	50	6253 - II	75	6452 - IV

Inventory of General Information

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
	K1 (Main River : Ab. Behesht Abad)										
1	K 1-1	Beheshet abad	Ab. Beshet Abad	46.0	32	2	52	50	39	24	36
2	K 1-1-2	Asad abad	Ab. Jounghan	56.3	32	7	59	50	37	0	36
3	K 1-1-3	Chelicheh, Chegha hest	Ab. Jounghan	61.7	32	12	29	50	38	43	36, 37
4	K 1-1-4	Gusheh, Deh cheshmeh, Gajoun	Ab. Jounghan	91.8	32	12	41	50	32	15	19, 20, 36, 37
5	K 1-1-5	Farsan, Babahydar	Ab. Jounghan / Ru. Sarab	74.8	32	17	42	50	32	29	19, 37
6	K 1-1-6	Harigan, etc	Ab. Jounghan / Ru. Sarab	36.8	32	21	51	50	25	39	19
7	K 1-1-7	Isa abad, Fill abad	Ab. Jounghan / Ru. Sarab	72.5	32	16	27	50	28	26	19, 20, 36, 37
8	K 1-1-8	Omid abad	Ab. Jounghan / Ru. Sarab	55.6	32	18	56	50	24	26	19
9	K 1-2-1	Salm, Balagholi	R. Kiyar	38.4	32	3	49	50	43	18	35, 36
10	K 1-2-2	Agha Rahim	R. Kiyar	33.5	32	6	7	50	43	8	35, 36
11	K 1-2-3a	Dastna	Ab. Shelamzar	49.7	32	1	19	50	46	52	35, 36
12	K 1-2-3b	Shelamzar, Jafar abad	Ab. Shelamzar	45.5	32	1	58	50	50	51	30,35
13	K 1-2-3c	Gahru, Haji abad, Zardkan balla & paien, Avarkan	Ab. Shelamzar	79.8	32	0	7	50	53	55	30, 35
14	K 1-2-3d	Ghaleh mameka, Mazreah bid	Ab. Shelamzar	61.8	31	59	5	50	58	48	30, 35, 52, 55
15	K 1-2-4a	Tashniz	R. Kiyar	29.5	32	4	12	50	50	4	35
16	K 1-2-4b	Kharaji, Qalehtak, Amir abad	R. Kiyar	46.4	32	6	40	50	47	20	35, 36
17	K 1-2-5a	Sar teshnize, Dezak, Musa abad	R. Kiyar	71.3	32	3	54	50	56	50	35, 55
18	K 1-2-5b	Dastgerd, Geshnize gaan, Ghaleh salim	R. Kiyar	83.1	32	8	7	50	59	0	35, 55
19	K 1-2-5c	Surag	R. Kiyar	56.6	32	2	28	51	2	48	35, 52, 55
20	K 1-2-5d	Irancheh	R. Kiyar	52.7	32	6	44	51	2	38	35, 55
21	K 1-2-5e	-	R. Kiyar	41.7	32	10	6	51	4	40	55
22	K 1-2-5f	Deh no	R. Kiyar	32.5	32	2	31	51	7	31	55
23	K 1-2-5g	-	R. Kiyar	71.4	31	59	25	51	7	29	52, 55
24	K 1-2-5h	Faradonbeh	R. Kiyar	71.0	31	56	56	51	11	17	52, 55
25	K 1-2-5i	-	R. Kiyar	53.4	31	56	27	51	14	57	49, 52, 55
26	K 1-2-5j	Borujen, Atagaleh	R. Kiyar	55.8	31	53	55	51	17	47	49
27	K 1-2-5k	Borujen, Naghaneh	R. Kiyar	72.0	31	54	4	51	21	6	49
28	K 1-2-5l	Borujen, Faradonbeh	R. Kiyar	49.9	32	1	3	51	16	4	49, 52, 54, 55
29	K 1-2-5m	Borujen	R. Kiyar	86.7	32	3	21	51	20	2	49, 54
30	K 1-2-5n	Borujen	R. Kiyar	90.2	31	58	38	51	22	19	49, 54
31	K 1-2-5o	Amamzadeh	R. Kiyar	56.9	32	3	11	51	9	28	54, 55
32	K 1-2-5p	Deh sheykh	R. Kiyar	70.1	32	5	9	51	13	47	54, 55
33	K 1-2-5q	Sefiddasht	R. Kiyar	53.0	32	8	18	51	13	20	54, 55
34	K 1-2-5r	-	R. Kiyar	70.2	32	12	6	51	11	29	55, 56
35	K 1-2-5s	Abass abad	R. Kiyar	55.5	32	6	10	51	7	43	55
36	K 1-2-5t	Sefiddasht, Zardia	R. Kiyar	71.7	32	10	49	51	8	8	55
37	K 1-2-5u	Kheir abad	R. Kiyar	74.4	32	9	9	50	55	22	35
38	K 1-2-6a	Shamsh abad	Ab. Jahanbin	62.2	32	10	32	50	52	3	35
39	K 1-2-6b	-	Ab. Jahanbin	50.0	32	9	37	50	48	47	35
40	K 1-2-6c	Taghanak, Bahram abad	Ab. Jahanbin	84.9	32	14	22	50	54	20	34, 35
41	K 1-2-6d	Farrokhshahr, Mazraeh digak miani	Ab. Jahanbin	66.3	32	13	56	51	0	14	34, 35, 55, 56
42	K 1-2-6e	Taher rabat	Ab. Jahanbin	68.3	32	15	46	51	3	15	34, 55, 56
43	K 1-2-6f	-	Ab. Jahanbin	72.9	32	17	50	51	5	31	55, 56
44	K 1-2-6g	Farrokhshahr	Ab. Jahanbin	53.8	32	18	9	50	56	60	34, 56
45	K 1-2-6h	Rameh mansuri	Ab. Jahanbin	88.3	32	21	36	50	56	31	34, 56
46	K 1-2-6i	Shahre kord, Eshgaftak	Ab. Jahanbin	71.2	32	19	31	50	51	18	34
47	K 1-2-6j	Nofech, Vardangan, Dareh ghashlagh	Ab. Jahanbin	87.7	32	25	21	50	49	32	34
48	K 1-2-6k	-	Ab. Jahanbin	66.6	32	31	34	50	41	56	34, 37, 38, 39
49	K 1-2-6l	No abad, Cheshmeh zan	Ab. Jahanbin	61.1	32	13	8	50	44	26	35, 36, 37
50	K 1-2-6m	Hafshejan, Sirak	Ab. Jahanbin	47.6	32	15	16	50	45	32	34, 35, 36, 37
51	K 1-2-6n	-	Ab. Jahanbin	95.7	32	18	11	50	47	18	34, 35, 37
52	K 1-2-6o	Chaleshtar, Pir-baloot, Arjang, Soltan sabz posh, Emam ghisi	Ab. Jahanbin	94.1	32	24	9	50	42	38	34, 37
53	K 1-2-6p	Kakalak	Ab. Jahanbin	43.6	32	26	33	50	42	7	34, 37
54	K 1-2-6q	Harchgan, Gerdab	Ab. Jahanbin	73.7	32	28	42	50	40	4	34, 37, 39
55	K 1-2-6r	Toomanak	Ab. Jahanbin	47.4	32	30	18	50	40	6	34, 37, 39
56	K 1-3	Juneqan	Ab. Jounghan	77.1	32	9	15	50	42	28	35, 36
57	K 1-4-1	Pardenjan, Keren	R. Gorgak	26.4	32	15	31	50	36	14	36, 37
58	K 1-4-2a	Sureshjan, Mostafa abad	R. Gorgak	63.7	32	17	7	50	40	59	36, 37
59	K 1-4-2b	Aqbolugh, Fateh abad	R. Gorgak	33.5	32	21	34	50	41	22	37
60	K 1-4-2c	Vanan, Khoy, Katek	R. Gorgak	56.8	32	23	9	50	37	39	37
61	K 1-4-2d	Harubi, Pir kal	R. Gorgak	68.4	32	26	41	50	33	36	37
62	K 1-4-2e	Surshejan	R. Gorgak	67.9	32	21	35	50	35	10	19, 37
63	K 1-4-3	Amir abad, Darch abad, Malek abad, Sohrab abad	R. Gorgak	71.0	32	20	57	50	32	10	19, 37
			Sub-total :	3,920.2							

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
	K2 (Main River : Ab. Kurang)										
64	K2-1	Karim abad, Kaj	Ab. Kurang	53.5	32	4	55	50	35	22	36
65	K2-2	Pole ahani	Ab. Kurang	43.8	32	3	29	50	32	35	20, 36
66	K2-3	Rostam abad, Dehow nadeh, Shekar abad, Aliku	Ab. Kurang	95.3	32	8	44	50	30	51	20, 36
67	K2-4	-	Ab. Kurang	42.2	32	6	22	50	26	48	20
68	K2-5-1a	Afsar abad, Dezdak, Godan, Dozdak balla & paien, Sayf abad, Darab, Godar, Bahman abad	Ab. Dez Daran (Du ab)	86.3	32	9	52	50	20	36	20
69	K2-5-1b	Dareh dezgah, Dareh razgah, Dareh dozgah	Ab. Dez Daran	79.0	32	12	51	50	13	49	20, 21
70	K2-5-2	Gudall	Ab. Dez Daran	31.9	32	6	45	50	21	46	20
71	K2-5-3	-	Ab. Dez Daran	37.6	32	7	18	50	17	15	20, 21
72	K2-5-4	Doabe samsami, Drab	Ab. Dez Daran	47.1	32	9	29	50	13	26	20, 21
73	K2-6	Dashtak	Ab. Kurang	36.9	32	11	12	50	26	34	20
74	K2-7	-	Ab. Kurang	49.7	32	12	1	50	22	14	20
75	K2-8	-	Ab. Kurang	35.0	32	14	35	50	23	22	19, 20
76	K2-9	Parjoft, Gol abad, Ghaleh haji baba, Bidgan, Parjoft, Yavar abad, Moor del, Nasir abad sefidar	Ab. Kurang	79.4	32	17	50	50	17	21	19, 20, 22
77	K2-10	Shahriari, Ghaleh bidomi	Ab. Kurang	48.5	32	15	34	50	15	11	19, 20, 21, 22
78	K2-10a	Chegaleh, Darshegeft, Mohamad gla, Birgan	Ab. Kurang	97.2	32	18	47	50	8	55	22
79	K2-11	Birgan, Douruzan abad	Ab. Kurang	58.4	32	22	16	50	11	5	19, 22
80	K2-12	Kolonchi	Ab. Kurang	55.7	32	23	13	50	6	44	22
81	K2-13	Cheshmeh kuhrang	Ab. Kurang	61.3	32	26	25	50	2	53	22
82	K2-14	-	Ab. Kurang	63.0	32	29	48	50	0	53	7, 11, 22, 24
83	K2-15	-	Ab. Kurang	39.7	32	31	29	50	3	6	22, 24
84	K2-16	-	Ab. Kurang	82.3	32	34	9	49	58	19	11, 24
			Sub-total ;	1,223.7							
	K3 (Main River : Middle Karoon)										
85	K3-0a	Cheteh, Lirali	Karoon	74.2	31	36	24	50	25	16	16
86	K3-0b	Murzam, Deh kohneh	Karoon	72.3	31	39	13	50	20	30	16
87	K3-0c	Mashhadi amir, Badamestan, Dareh shuor	Karoon	60.2	31	32	29	50	29	19	16, 29, 32
88	K 3-1-1	Dareh shur	Karoon	49.1	31	40	10	50	30	22	16, 32
89	K 3-1-2	-	Karoon	38.5	31	38	39	50	33	1	32
90	K 3-1-3	Shiasi, Amam zadeh	Karoon	47.2	31	36	60	50	38	53	32
91	K 3-1-4	Kinak	Karoon	45.2	31	37	32	50	44	41	31, 32
92	K 3-1-5	Armand	Karoon	95.8	31	37	2	50	49	55	31, 32
93	K 3-1-6	Farsun, Sim naghaleh, Dasht armand, Joghd	Karoon	47.4	31	39	52	50	50	58	31
94	K 3-1-7	Buger	Karoon	87.0	31	42	19	50	43	52	31, 32, 33
95	K 3-1-8	Sunak, Emam zadeh hydar	Karoon	37.7	31	42	29	50	48	33	31
96	K 3-1-9	Darehe yaas, Darehe beed, Madan	Karoon	73.7	31	44	25	50	51	57	30, 31
97	K 3-1-10	Chahar mouran, Dareh esheghe, Sarkon balla & paien	Karoon	53.8	31	46	46	50	46	20	30, 31, 32, 33
98	K 3-1-11	Sharak-gadid doorak	Karoon	55.1	31	50	20	50	41	18	33
99	K 3-1-12	Puraz, Berenjekoon	Karoon	64.9	31	48	25	50	39	41	33
100	K 3-1-13	Gel sefid, Rahim abad, Takhteh chub	Karoon	40.9	31	53	36	50	35	38	33
101	K 3-1-13a	Ab gaiur, Bare mordeh	Karoon /Ab Gaiur	40.0	31	50	23	50	35	17	33
102	K 3-1-14a	Kavand	Karoon / Tan Mahmud	45.6	31	54	14	50	32	2	15, 33
103	K 3-1-14b	Sartange mahmud, Kavand darvishan	Tan Mahmud / Tan Gandab	68.1	31	52	25	50	26	53	15, 33
104	K 3-1-15	Sar mor, Lirab, No turki, Abe sard, Mamasani	Ab. Kali	45.0	31	56	55	50	29	19	15, 33
105	K 3-1-16	Aziz abad balla & paien	Ab. Kali	52.2	31	56	57	50	23	31	15
106	K 3-1-17	Morad abad, Najif abad	Ab. Kali	59.0	31	59	38	50	23	43	15, 20
107	K 3-1-18	Chahr mura	Ab. Kali	45.4	32	3	21	50	20	41	20
108	K 3-1-19	Lushesh	Ab. Kali	53.7	32	2	9	50	18	12	15, 20
109	K 3-2-1	Shiasi, Band var	Ab. Sarkhun	49.6	31	39	35	50	38	18	32
110	K 3-2-2	Kanamee, Shiassi	Ab. Sarkhun	63.5	31	43	42	50	39	14	32, 33
111	K 3-2-3	Deh-kohneh, Varzard, Emam zadeh jafar, Deh no, Kanami	Ab. Sarkhun	48.9	31	44	54	50	35	25	32, 33
112	K 3-2-4	Malek shir, Chole-dan, Sarqal-eh, Sarma-zeh, Ghaeedan, Kaheedan	Ab. Sarkhun	45.0	31	42	41	50	33	30	15,16, 32, 33
113	K 3-2-5	Sarkhun	Ab. Sarkhun	42.9	31	46	48	50	29	54	15, 32, 33
114	K 3-2-6	Gandomkar	Ab. Sarkhun	33.5	31	47	51	50	34	45	33
115	K 3-2-7	-	Ab. Sarkhun	59.8	31	49	42	50	29	44	15, 33
116	K 3-3-1	Duporan, Bag-giran, Gautoot, Rigak	R. Sabezkuh	43.1	31	56	23	50	37	45	33
117	K 3-3-2a	Damab, Deh no (pain, bala)	R. Sabezkuh	60.4	31	52	44	50	42	32	30,33
118	K 3-3-2b	Ralem abad, Parkhor, Zolm abad, Joghdan	R. Sabezkuh	49.3	31	49	48	50	47	53	30, 33
119	K 3-3-2c	-	R. Sabezkuh	59.2	31	45	41	50	55	9	30, 31
120	K 3-3-2d	Anjir	R. Sabezkuh	58.4	31	47	7	51	0	29	30, 31, 51, 52
121	K 3-3-2e	Naghan, Marik, Kerdan	R. Sabezkuh	33.2	31	56	38	50	42	43	30, 33
122	K 3-3-2f	Jahmon, Karch bala, Jeghdan	R. Sabezkuh	38.8	31	54	48	50	45	56	30, 33
123	K 3-3-2g	Jehraz, Gashed, Parkhur, Chahartaq	R. Sabezkuh	65.7	31	51	44	50	49	41	30, 33

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
124	K 3-3-2h	Jerzgoon	R. Sabezkuh	55.9	31	48	32	50	55	45	30
125	K 3-3-3a	Ardal	R. Sabezkuh	53.1	32	0	6	50	40	28	33, 36
126	K 3-3-3b	Cheshmeh sulegan	R. Sabezkuh	58.1	31	58	23	50	44	51	30, 33, 35, 36
127	K 3-4-1	Chelo, Deh Kohneh, Haftpiran	Karoon	49.8	31	58	15	50	34	40	33, 36
128	K 3-4-2	Davazdah emam, Sar char	Karoon	62.7	32	0	33	50	30	8	15, 20, 33, 36
129	K 3-4-3	-	Karoon	25.9	32	2	13	50	31	36	20, 33, 36
130	K 3-5	No turki	Ab. Kari	37.8	31	54	39	50	24	47	15
131	K 3-6	Gerdepineh, Abass abad, Cheshmeh soliman, Rupineh, Abbas abad	Ab. Kari	62.7	32	3	15	50	25	17	20
			Sub-total ;	2,509.1							
	K4 (Main River ; Ab. Vanak)										
132	K4-1-1	-	Ab. Vanak	62.6	31	40	13	50	55	33	31
133	K4-1-2	-	Ab. Vanak	66.5	31	38	42	51	2	20	31, 51
134	K4-1-3	Sar pir (Relocation to Borujen)	Ab. Vanak	56.0	31	36	54	51	8	51	51
135	K4-1-4	Shams abad	Ab. Vanak	62.6	31	30	20	51	13	54	45, 48, 50, 51
136	K4-1-5	Vanak	Ab. Vanak	109.1	31	31	45	51	20	3	45, 50, 51
137	K4-1-6	Cheshime ali	R. Sulegan	55.9	31	34	57	51	16	4	50, 51
138	K4-1-7	Lah-daraze,Tagargab, Godarkabk	R. Sulegan	51.7	31	40	23	51	15	18	50, 51
139	K4-1-7a	Sulegan, Gharch aaghj	R. Sulegan	139.9	31	36	59	51	20	22	50, 51
140	K4-1-7b	Kezan (bala & pain), Dizjan	R. Sulegan	84.6	31	39	11	51	24	1	50
141	K4-1-7c	Hossein abad-dardashe,Sekaz, Deh nesa, Narmeh	R. Sulegan	105.7	31	36	53	51	28	27	50, 70
142	K4-1-7d	Asi abad, Mehrgerd	R. Berenji - R. Sulegan	83.0	31	33	15	51	32	58	50, 67, 70
143	K4-1-7e	-	R. Berenji - R. Sulegan	52.9	31	28	40	51	33	8	67, 70
144	K4-1-7f	Haji abad, Sharif abad, Godar	R. Berenji - R. Sulegan	98.7	31	28	37	51	39	33	64, 67, 70
145	K4-1-7g	Sivah galak, Dekard, Heydar abad	R. Sulegan	77.0	31	38	46	51	33	23	50, 70
146	K4-1-7h	Marouk, Seadat abad, Mehdi abad	R. Sulegan	73.0	31	38	27	51	38	8	70
147	K4-1-7i	Dari daraz boulat gharin, Doulat gharm	R. Sulegan	71.3	31	33	14	51	38	7	67, 70
148	K4-1-7j	Shur jeh, Ghapaghalu, etc	R. Sulegan	96.2	31	33	3	51	43	12	67, 69, 70
149	K4-1-7k	Hossein abad	R. Sulegan	52.4	31	37	3	51	43	50	69, 70
150	K4-1-7l	Cheshme sard	R. Sulegan	80.0	31	43	3	51	36	25	70, 71
151	K4-1-7m	Tang aahan, Garm abad, etc	R. Garmab - R. Sulegan	161.3	31	44	44	51	28	40	49, 50, 70, 71
152	K4-1-7n	Duba arab	Che. Ghanbar - R. Sulegan	121.4	31	48	17	51	21	38	49,50
153	K4-1-8	Moorchegan, Bijgerd, Godarkabk	R. Aghabolugh	110.6	31	44	58	51	9	59	50, 51, 52
154	K4-1-8a	Emamoevs, Hyder abad	R. Aghabolugh	93.3	31	44	4	51	19	56	49, 50
155	K4-1-8b	Kardshahi, Godarkabk	R. Aghabolugh	70.3	31	47	35	51	15	24	49, 50, 51, 52
156	K4-1-9	Vastegan, Nasir abad	R. Aghabolugh	67.1	31	46	29	51	4	44	51, 52
157	K4-1-10	Gandoman	R. Aghabolugh	97.7	31	51	17	51	12	1	49, 52
158	K4-1-11	Gandoman, Hosein-abad, Kotak Senajan, Maamureh, Chermineh	R. Aghabolugh	143.4	31	52	7	51	6	6	52
159	K4-1-12	Boldaji	R. Aghabolugh	69.4	31	56	45	51	2	57	52
160	K4-1-13	Kalbibak	R. Aghabolugh	104.2	31	53	33	50	58	50	30,52
161	K4-1-14	Seif abad, Khani abad, Saki abad, Sang chin, Avargan, Ahmad abad, Khedar abad, Avargan, Seyed ali, Sibak, Dastgerd, Metoei	R. Aghabolugh	101.9	31	53	50	50	54	26	30
162	K4-1-15	Gelugerd, Ali abad, Sultan abad	R. Aghabolugh	39.6	31	56	21	50	49	42	30
163	K4-2-1	-	R. Sulegan	66.2	31	42	21	51	0	27	31, 51
164	K4-3-1	Durahan, Gerdebisheh, Deh khoda	R. Gerdbisheh	72.5	31	38	43	51	10	14	51
165	K4-3-2	Deh tout, Cheshimeh abdal, Deh bagh, Godar goosh	R. Gerdbisheh	71.8	31	41	25	51	10	55	51
166	K4-4-1	Tang golgan	Ab. Jaghjagh	48.6	31	27	43	51	18	46	45, 50
167	K4-4-1a	Tang sirveh	Ab. Jaghjagh	51.7	31	24	23	51	20	3	45
168	K4-4-1b	Chal ghafa, Tang jalehghafa	Ab. Jaghjagh	40.8	31	23	23	51	24	56	45
169	K4-4-2a	-	Ab. Jaghjagh	41.8	31	29	43	51	23	50	45, 50
170	K4-4-2b	Ghalaeh gohadam	Ab. Jaghjagh	94.8	31	28	52	51	27	4	45, 50, 67, 70
171	K4-4-3	Kanurcheh	Ab. Jaghjagh	67.7	31	25	18	51	28	14	45, 67
			Sub-total ;	3,214.8							
	K5 (Main River ; Bazoft)										
172	K5-1	Teriz, Barge anjir, Kabuci, Jaroye balla & paien, Kabotarankerm tabe balla & paien	Ab. Bazoft	36.2	31	41	31	50	26	36	16
173	K5-2	Talafgir, Asujar, Balutak, Morghak, Barshalan dan, Karestan	Ab. Bazoft	55.9	31	40	52	50	24	21	16
174	K5-3	Shalil (bala, paien)	Tri. of Bazoft	47.2	31	43	49	50	28	31	15, 16, 32
175	K5-4	Dourak khanbari, Deh kal	Ab. Bazoft	70.4	31	47	25	50	24	37	15, 16
176	K5-5	Mur varid	Ab. Bazoft	71.3	31	45	23	50	20	14	15, 16
177	K5-6	Sarnaz	Ab. Bazoft	64.3	31	50	20	50	20	36	15
178	K5-7	Landeh	Ab. Bazoft	30.9	31	48	46	50	16	46	15, 18
179	K5-8	Sanara	Ab. Bazoft	21.1	31	51	53	50	15	42	15, 18
180	K5-9	-	Ab. Bazoft	17.8	31	53	12	50	17	24	15

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
181	K5-10	Kahjenvar, Chidak	Tri. of Bazoft	63.5	31	54	31	50	11	57	15, 18
182	K5-11	Deh deli	Ab. Bazoft	52.4	31	54	51	50	18	21	15, 18
183	K5-12	Ghateh galehmu, Hofel	Ab. Bazoft	63.0	31	58	18	50	11	2	15, 18, 21
184	K5-13-1a	-	Tri. of Bazoft	32.3	31	58	38	50	15	29	15, 18, 20, 21
185	K5-13-1b	-	Tri. of Bazoft	52.1	32	3	56	50	14	40	20, 21
186	K5-13-2	-	Tri. of Bazoft	35.4	31	57	53	50	18	30	15
187	K5-14	Demai	Ab. Bazoft	31.5	32	0	49	50	12	56	18, 21
188	K5-15	-	Ab. Bazoft	42.4	32	4	37	50	9	58	21
189	K5-16	-	Tri. of Bazoft	53.5	32	2	28	50	7	28	18, 21
190	K5-17	Muvz	Ab. Bazoft	92.6	32	8	39	50	9	24	21
191	K5-18	-	Ab. Bazoft	22.0	32	6	8	50	6	41	21
192	K5-19	Talkheh dan, Dorak, Bazgeron	Tri. of Bazoft	52.9	32	7	1	50	3	31	21
193	K5-19a	Chaman goly, Tabarak, Cham ghaleh balla & paien, Ghaleh kharabeh	Ab. Bazoft	75.2	32	10	4	49	59	58	8, 21
194	K5-20	Nazi, Mahmod sham, Sange namak, Damshat, Mian	Tri. of Bazoft	71.9	32	13	34	50	7	38	21, 22
195	K5-21	Hosain abad, Tarom, Roobat kooh, Telord, Tarom, *Roobat-kooh, Mahmood-abad, Damshat, Miyan dohan* oliya	Ab. Bazoft	43.3	32	13	28	50	4	13	21, 22
196	K5-22	Chenar	Tri. of Bazoft	61.6	32	13	56	49	58	9	7, 8, 21, 22
197	K5-23	Alagi oliya, Dorak sofla	Ab. Bazoft	69.2	32	16	60	50	2	54	7, 21, 22
198	K5-24	-	Ab. Bazoft	46.7	32	17	28	49	57	7	7, 21, 22
199	K5-25	Houshout, Tik, Kesriz	Ab. Bazoft	57.9	32	19	45	49	58	35	7, 22
200	K5-26	Torki	Ab. Teraki (Tri. of Bazoft)	91.7	32	22	17	50	0	0	7, 22
201	K5-27	Tashnavi	Tri. of Bazoft	69.5	32	25	19	49	57	11	7, 22
202	K5-28	-	Ab. Bazoft	33.8	32	22	58	49	52	11	7
203	K5-29-1	-	Tri. of Bazoft	33.9	32	27	57	49	51	17	7, 11
204	K5-29-2	-	Ab. Sharmak (Tri. of Bazoft)	62.6	32	27	37	49	54	40	7, 11
205	K5-29-3	-	Tri. of Bazoft	28.8	32	30	44	49	49	19	7, 11
206	K5-29-4	-	Tri. of Bazoft	67.5	32	31	52	49	53	33	7, 11
207	K5-30	Gharehgar, Jamas, Dora, Pozeh bayar, Jagheh sour	Ab. Bazoft	82.1	32	26	57	49	47	29	7, 10, 11, 12
208	K5-31-1	-	Tri. of Bazoft	29.0	32	32	26	49	46	24	7, 11, 12
209	K5-31-2	-	Tri. of Bazoft	34.6	32	34	9	49	49	6	11
210	K5-32-1	Siroun	Ab. Bazoft	57.4	32	32	32	49	43	25	7, 10, 11, 12
211	K5-32-2	-	Ab. Bazoft	68.1	32	36	17	49	42	49	11, 12
212	K5-33	-	Ab. Bazoft	81.5	32	32	36	49	39	3	10, 12
			Sub-total :	2,174.7							
	K6 (Main River : Lordegan)										
213	K6-1-1	Keroun, Bideleh	R. Moni	66.7	31	34	1	50	31	48	16, 29, 32
214	K6-1-2	Ab bidak, Meshk douzm, Moni, Charoub	R. Moni	71.3	31	34	4	50	35	37	29, 32
215	K6-1-3	Chiga, Pol borideh baiia & paien	R. Lordegan	74.5	31	34	34	50	42	24	31, 32
216	K6-1-4	Karef balla & paien, Khalil abad, Kolgah milas, Deh chenar, Goraz abad, Gosheh	R. Lordegan	54.8	31	30	14	50	43	46	26, 29, 31, 32
217	K6-1-5	Kal gachi, Naghan, Kardan, Dar joneh, Naghan balla & paien, Ghaleh cheh	R. Lordegan	62.8	31	32	47	50	46	39	31, 32
218	K6-1-6	Shirani, Toutang, Tang kalureh, Darakeh, Zarin	R. Lordegan	56.9	31	31	58	50	53	30	26, 31
219	K6-1-7	Dehnu bordbar, Sini, Barjoui	R. Lordegan	104.6	31	34	17	51	0	40	31, 51
220	K6-1-8	Alauni, Seif abad, Deh chenar, Doumakan	R. Lordegan	104.7	31	33	7	51	5	35	48, 51
221	K6-1-9	Gushki, Feiz abad, Deh ali, Deh rashid	R. Lordegan	53.4	31	31	13	51	9	55	48, 51
222	K6-1-10	Deh sahara, Bagh behzad, Sileh,etc	R. Lordegan	78.8	31	26	58	51	9	14	48, 51
223	K6-2	Monj	R. Moni	66.5	31	29	46	50	39	39	29, 32
224	K6-3-1	Milas, Mahour, Kol gah, Chale shirin	R. Lordegan	70.0	31	25	11	50	47	13	26, 29
225	K6-3-2	Abza, Sar dashet	R. Lordegan	58.7	31	22	32	50	53	54	26
226	K6-4-1	Lordegan, Piran, Tal maroun, Deh no, Moonjezmoie	R. Lordegan	130.7	31	28	11	50	51	15	26, 31
227	K6-4-2	Kahyan, Chellehgan	R. Lordegan	69.5	31	27	10	50	59	18	26, 31, 48
228	K6-4-3	Amiri (pain, bala)	R. Lordegan	78.4	31	24	36	50	57	31	26, 48
229	K6-4-4	Gorg ala, Deh no gudarz	R. Lordegan	71.9	31	21	44	51	2	37	26, 48
230	K6-4-5	Chanar mahmoodi	R. Lordegan	79.3	31	24	46	51	6	24	48
231	K6-5-1	Chah gare	R. Lordegan	65.0	31	35	15	50	55	59	31
232	K6-6-1	Bardbar	R. Lordegan	55.8	31	29	12	51	1	10	26, 31, 48, 51
			Sub-total :	1,474.0							
	K 7 (Main river)										
233	K7-0-1	Murgh shenar	Khersan	26.9	31	10	51	51	12	13	47
234	K7-0-2	Deh kahnch, Daren niyek, Narmeh, Gili	Khersan	29.8	31	11	20	51	8	29	47
235	K7-0-3	Shahnadjaf, Peruz, Bogh kaj	Tri. of Khersan	115.4	31	16	57	51	6	32	47, 48
236	K7-0-4	Chaleh badoum, Rosta gieg	Khersan	53.4	31	12	8	51	13	37	46, 47, 48
237	K7-0-5	Gendab, Bizhgan, Sefidar, Dam-ab	Tri. of Khersan	34.2	31	16	38	51	9	60	47, 48

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
238	K7-0-5-1a	Gerdab, Shilaneh, etc	R. Gardab (Tri. of Khersan)	54.9	31	12	45	51	17	53	45, 46, 47
239	K7-0-5-1b	-	R. Gardab	45.3	31	15	4	51	20	25	45, 46
240	K7-0-5-2	Malkhalifeh, Sadgam, Dasht pagar, Kalvari, Salmani, Tal eshgoftan	R. Gardab	70.0	31	16	43	51	16	1	45, 46, 47, 48
241	K7-0-5-3	Abuasagh, Raba ahmadi, Chahr deh, Mishan, Kando, Shahriar	Tri. of R. Gardab	82.3	31	20	33	51	14	24	45, 48
242	K7-0-5-4	Sahl abad, Deh sookhteh	R. Pangan (Tri. of R.	36.0	31	19	6	51	10	44	48
243	K7-0-5-5	Gordab bala, Shirmard	Tri. of R. Gardab	87.1	31	24	37	51	13	43	45, 48
244	K7-0-6	Khersan	Khersan	59.1	31	8	46	51	19	5	46
245	K7-0-6a	Dashtak balla, Mimand	Tri. of Khersan	33.8	31	6	49	51	17	32	46
246	K7-0-7	Chahrah	Khersan	44.6	31	10	45	51	23	15	46
247	K7-0-8	Abe malakh, Sivar	Khersan, R. Marbor	68.7	31	6	29	51	23	14	46
248	K7-0-9	Mondegan	Tri. of R. Marbor	68.0	31	3	12	51	24	32	46
249	K7-0-10-1	Rud abad	Ab. Garmak (Tri. of	14.3	31	9	23	51	26	39	46
250	K7-0-10-2	Tang khasbeg	Tange Khoshk (Tri. Of Ab.	65.5	31	11	15	51	30	50	46, 66
251	K7-0-10-3a	Sidan, Iran dareh	R. Polar Dareh (Tri. of R.	46.5	31	13	45	51	24	55	45, 46
252	K7-0-10-3b	-	R. Polar Dareh	48.9	31	18	29	51	20	50	45, 46
253	K7-0-10-4	Ala jabayer, Tang ab	R. Semiroum	54.5	31	13	46	51	29	1	45, 46, 66, 67
254	K7-0-10-5a	Leh jarui, Bagh maghsud ali	R. Kharkosh (Tri. of R. Semirom)	67.3	31	18	29	51	27	49	45, 46
255	K7-0-10-5b	-	R. Kharkosh	85.3	31	20	8	51	23	0	45
256	K7-0-10-6a	Zargham abad	R. Hana (Tri. of R. Semirom)	49.6	31	13	40	51	35	31	66, 67
257	K7-0-10-6b	-	R. Hana	62.0	31	14	28	51	40	12	66, 67
258	K7-0-10-6c	Baneh , Cheshmeh azam, Gol aghaji	R. Hana	61.4	31	18	41	51	41	30	67
259	K7-0-10-6d	Delma	R. Germuk (Tri. of R. Hana)	60.4	31	21	22	51	44	15	64, 67
260	K7-0-10-6e	garmouk, Naji abad	R. Germuk	48.7	31	24	54	51	42	57	64, 67
261	K7-0-10-6f	Sohran	R. Hana	32.9	31	10	30	51	38	22	66
262	K7-0-10-6g	Chashmeh khuni	R. Hana	91.5	31	8	8	51	42	29	66
263	K7-0-10-6h	Hana, Ghaleh mokhtar khan	R. Hana	93.4	31	11	24	51	46	51	65, 66
264	K7-0-10-6i	-	R. Hana	31.1	31	13	39	51	43	30	65, 66, 67
265	K7-0-10-6j	-	R. Rahimi (Tri. of R. Hana)	52.2	31	15	41	51	51	34	64, 65
266	K7-0-10-6k	Shafi abad	R. Rahimi	68.1	31	17	22	51	46	31	64, 65, 66, 67
267	K7-0-10-6l	Cheshmeh ghajeh, Ghaleh arezomand	Chah Tel (Tri. of Rahimi)	67.4	31	18	30	51	51	0	64
268	K7-0-10-6m	Aghbolagh	Sang Sefid (Chah Tel)	26.0	31	22	2	51	49	50	64
269	K7-0-10-6n	Jarkan	Sang Sefid	60.9	31	25	58	51	49	49	64
270	K7-0-10-6o	Sartagh	Sang Sefid	33.3	31	24	48	51	46	39	64, 65
271	K7-0-10-6p	Ghabre kikha, Ghaleh sangi	R. Shesh Boluki (Tri. of R. Hana)	56.3	31	9	57	51	54	1	65
272	K7-0-10-6q	-	R. Shesh Boluki	73.9	31	7	45	51	50	57	65
273	K7-0-10-6r	Pol gadki, Tange khoshk	R. Shesh Boluki	70.0	31	3	46	51	54	48	65
274	K7-0-10-6s	-	R. Shesh Boluki	81.9	31	8	59	51	57	48	65
275	K7-0-10-6t	-	Tri. of R. Shesh Boluki	61.6	31	13	28	51	54	19	64, 65
276	K7-0-10-7	Ghaleh sistan, Hast	R. Dahan (Tri. of R. Semirom)	105.3	31	19	34	51	31	47	45, 46, 67
277	K7-0-10-8	Cheshmeh hasan khani, Zargham abad	R. Dahan	98.9	31	18	49	51	36	59	67
278	K7-0-10-9	Samirum, Jozar, Tapeh shahidan	R. Dahan	124.4	31	24	37	51	35	52	67
279	K7-0-11	-	R. Marbor	26.5	31	7	35	51	28	22	46, 66
280	K7-0-12	Nayed ali	R. Marbor	39.7	31	4	20	51	29	51	46, 66
281	K7-0-13-1	-	Tri. of R. Marbor	58.4	31	9	7	51	34	12	46, 66
282	K7-0-13-2	Khak daneh, Chineh, Mourg	Tri. of R. Marbor	47.5	31	6	35	51	33	35	46, 66
283	K7-0-14-1	Deli	Tri. of R. Marbor	50.0	31	1	44	51	36	32	63, 66
284	K7-0-14-2	Kameh, Ghaleh iraj, Ghaleh gholambosien	Tri. of R. Marbor	29.3	31	5	12	51	36	13	66
285	K7-0-14-3	Ghareh bor, Dideh jan, Emamzadeh mohamad, Qanat gifteh giveh sin	Tri. of R. Marbor	69.4	31	3	7	51	39	31	63, 66
286	K7-0-14-4	Abe pelekan	Tri. of R. Marbor	202.7	31	2	37	51	48	44	60, 65, 66
287	K7-0-14-5	Tange jelu	Tri. of R. Marbor	161.2	30	58	18	51	46	4	60, 63, 65, 66
288	K7-0-15	Khineh	R. Marbor	34.0	31	1	55	51	29	1	46, 66
289	K7-0-16	Khefv, Emamzade seid mahmad	Tri. of R. Marbor	74.3	30	59	16	51	27	8	41, 46, 63, 66
290	K7-0-17	-	R. Marbor	69.4	30	59	50	51	33	18	41, 63, 66
291	K7-0-18	Barand balla & paien	R. Marbor	74.7	30	57	1	51	39	58	63
292	K7-0-19-1	Gardaneh bizhan, Kal balko, Doregan	R. Marbor	63.1	30	54	59	51	34	27	63
293	K7-0-19-2	-	Tri. of R. Marbor	51.2	30	56	14	51	30	48	41, 63
294	K7-0-20a	Cheshmeh khonyar, Ganjegan, Dorahan, Deh bozurg, Safdar abad, Lurkash, Kahangan	R. Marbor, R. Deli Surkh (Tri. of R. Marbor)	72.8	30	52	55	51	37	34	63
295	K7-0-20b	Dangzeli, Noghl	R. Deli Surkh	57.1	30	49	53	51	38	59	63

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
296	K7-0-21	Bazargah, Amir abad, Rahiz, Shahid, Kahardan, Valad khani	R. Marbor	117.1	30	51	46	51	45	14	60, 63
297	K7-0-22	Dareh burgoli, Por rouz	R. Marbor	54.0	30	46	39	51	42	54	60, 62, 63
298	K7-0-23	Dareh narmak	R. Marbor	48.9	30	43	58	51	47	5	60, 61, 62, 63
299	K7-0-24	-	R. Kal Sartang (R. Marbor)	81.5	30	47	45	51	48	18	60, 63
300	K7-1	Deh no, Deh barez, Shevar, Jocali	Khersan	67.6	31	30	17	50	22	34	13, 16
301	K7-2	Suhrab, Alishir, Chalderaz, Shoar, Mil shoa, Sarchour, Dareh tangi, Mil sha, Shouar	Khersan	70.2	31	31	9	50	27	11	13, 16, 29, 32
302	K7-3	Lirouk	Khersan	32.4	31	28	10	50	27	24	13, 16, 29
303	K7-4	Tark, Chal chenar, Rameh roun	Khersan	50.6	31	26	43	50	33	13	13, 29
304	K7-5-1	Tange litoun, Midan, Pagard, Dooragh, Rud rish	Tri. of Khersan	66.5	31	22	33	50	33	56	13, 29
305	K7-5-2	Amiri, Deh chali band	Tri. of Khersan	55.0	31	24	57	50	28	30	13, 29
306	K7-5-3	Dehe bashiri	Tri. of Khersan	54.1	31	20	37	50	31	60	13, 29
307	K7-5-4	Midan, Dorish, Pataveh, Gerdpi, Darboland	Tri. of Khersan	66.5	31	16	51	50	37	35	28, 29
308	K7-5-5	Dareh ajam, Dar beri	Tri. of Khersan	58.2	31	11	0	50	44	3	27, 28, 29
309	K7-5-6	Tahleh zar, Rameh roon	Tri. of Khersan	30.3	31	13	47	50	43	35	27, 28, 29
310	K7-6-1	Silo, Chalgah	Tri. of Khersan	56.4	31	20	26	50	38	49	29
311	K7-6-2	-	Tri. of Khersan	75.9	31	13	37	50	46	34	26, 27, 28, 29
312	K7-7	Bard pahn, Mohreh gham balla & paien, Lal mineh, Shamlak	Khersan	35.4	31	23	53	50	38	36	29
313	K7-8	Ab chenar, Gorab zini, Dareh bandon, Dareh mourd	Khersan	38.4	31	27	50	50	35	48	29, 32
314	K7-9	Mel sefid, Shah hosyni, Dareh robah, Sar taveh	Khersan	62.5	31	26	8	50	41	22	26, 29
315	K7-10	Poleh, Jalaleh, Mashmi	Tri. of Khersan	37.7	31	20	53	50	42	1	29
316	K7-11	Angolak zirna	Khersan	64.7	31	21	37	50	45	10	26, 29
317	K7-12-1	Poleh	Tri. of Khersan	30.7	31	17	35	50	46	27	26, 29
318	K7-12-2	-	Tri. of Khersan	58.2	31	12	43	50	54	14	26, 27
319	K7-12-3	Dareh moorzard	Tri. of Khersan	22.2	31	14	15	50	49	57	26, 27
320	K7-13	Ballru, Faryabproyab	Khersan	33.1	31	16	14	50	51	34	26, 27
321	K7-14	Labardi, Paryab, Deh zi, Dod rah	Khersan	61.3	31	20	4	50	50	37	26
322	K7-15	Paryab, Jalaleh	Khersan	37.5	31	17	7	50	54	28	26
323	K7-16	Tange ghebleh	Khersan	54.4	31	13	34	50	57	55	26, 27, 47
324	K7-17	-	Tri. of Khersan	79.4	31	19	2	50	57	29	26, 48
325	K7-18	Moono, Darkab, Dorj, Dehga, Faj	Khersan	73.5	31	14	58	51	1	53	26, 27, 47, 48
326	K7-19	-	Tri. of Khersan	26.5	31	11	12	51	0	30	27, 47
327	K7-20	Mareh gaz	Khersan	49.7	31	11	25	51	6	6	47, 48
328	K7-21	Dar kalate mahmodi, Monj, Dehe paien, Dashte boz, Bar eshkoft, Emam zadeh mahmood, Dorah	Khersan	42.0	31	8	25	51	5	19	47
329	K7-22	Katak, Dareh shour, Grozeh	Khersan	42.8	31	8	20	51	11	18	46, 47
330	K7-23	Dingo, Dezak, Poshteh cheh	R. Boshar	30.5	31	4	30	51	9	43	47
331	K7-24-1	Tang arj, Shab liz, Baba haji, Benva	R. Shab (Tri. of Boshar)	51.5	31	2	59	51	7	4	47
332	K7-24-2	Dareh mishoon	R. Shab	37.1	31	6	51	51	2	34	27, 47
333	K7-24-3	-	R. Shab	26.8	31	4	13	51	7	50	47
334	K7-24-4	-	R. Shab	26.5	31	9	1	50	59	47	27, 47
335	K7-25	Cheshmeh mir hasani, Galkah, Sar soor, Lehsavareh, Bizhgi	R. Boshar	67.4	31	5	25	51	13	16	46, 47
336	K7-26	-	R. Boshar	35.9	31	3	26	51	16	8	46, 47
337	K7-27	Baraie, Tange ravagh	R. Boshar	23.1	31	0	0	51	12	42	41, 44, 47
338	K7-28	Jongah, Chenare baram balla & paien, Tamnak	R. Boshar	73.2	31	1	16	51	17	50	41, 44, 46, 47
339	K7-29	Ahmad gharib, Gandizar, Badenko sofla & oliya	R. Boshar	60.4	30	58	39	51	19	18	41, 46
340	K7-30	Cheh yel, Gariveh, Sar chal, Gardan talbaladoon, Dora, Chat, Samandi, Ghanat	Tri. of Boshar	48.9	30	59	50	51	9	14	41, 44, 47
341	K7-31	Delij balla & paien	R.Boshar	56.8	30	55	51	51	15	28	41, 44
342	K7-32-1	Dashtak, Karami	R. Kareh (Tri. of Boshar)	79.9	30	55	14	51	24	23	41
343	K7-32-2	-	R. Kareh	27.4	30	56	47	51	20	53	41
344	K7-33	Dareh chenari, Deh shikh, Nadeh, Betari, Dareh sar anjiri	R. Boshar	33.7	30	53	7	51	20	20	41
345	K7-34-1	Delibechak, Mougar, Tang suran	Kalle Delibechek (Tri. of Boshar)	56.0	30	54	34	51	13	32	41, 44
346	K7-34-2	Moujerd	Kalle Delibechek	27.1	30	54	3	51	11	57	41, 44
347	K7-35-1	Deh chenar paien & balla, Ali karami	Tri. of Boshar	83.7	30	49	56	51	14	5	41, 44
348	K7-35-2	Mian chenar, Sarchenar, Damchenar balla & motevaset	Tri. of Boshar	67.4	30	52	2	51	8	36	44
349	K7-35-3	-	Tri. of Boshar	33.9	30	47	3	51	16	40	41, 44
350	K7-36-1	Mehriz, Dar shabi, Dareh chili, Bareaftab, Koleh shiran	R. Boshar	61.8	30	50	43	51	23	0	41
351	K7-36-2	Rahe mali, Abgarmak, Tolki balla	Tri. of Boshar	42.5	30	45	15	51	24	1	41, 42
352	K7-36-3	Kalous balla & paien, Sardasht kalous, Doabe kalous	R. Boshar	29.8	30	40	47	51	27	31	41, 42, 44
353	K7-36-3a	Sisacht, Hosien abad	R. Pole Clou (Tri. of Boshar)	57.9	30	51	50	51	27	52	41, 63

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
354	K7-36-3b	Dehno, Sar mour, Kakhdan	R. Pole Clou	34.1	30	49	23	51	29	47	41, 63
355	K7-36-3c	-	R. Pole Clou	42.8	30	50	11	51	33	15	41, 63
356	K7-36-4	Amir abad, Hasan abad, Saris, Jamal, Bandoun	R. Boshar	70.1	30	46	50	51	27	44	41, 42, 63
357	K7-36-5	Dehe bare aftab	R. Seris (Tri. of Boshar)	52.2	30	46	57	51	34	15	41, 42, 63
358	K7-37-1	Chitab, Salehan, Lingan	R. Kabgian (Tri. of Boshar)	25.5	30	48	15	51	18	57	41
359	K7-37-2	Naghareh khaneh, Balout karoon, Abe zalou	R. Kabgian	33.7	30	46	52	51	21	17	41, 42
360	K7-37-3	Deli kho, Chitu, Dareh khani, Deh bozorg, Parshekoft	R. Kabgian	30.0	30	43	41	51	18	10	41, 42
361	K7-37-4a	Cheshmeh roci, Vard chat, Dez khalu, Mirghazab, Kal gaz, Jaiil	R. Kabgian	50.2	30	42	55	51	21	37	41, 42
362	K7-37-4b	Laruni, Jounak, Ab dareh, Abe chenar, Deh poot	R. Kabgian	50.2	30	38	14	51	27	50	42, 62
363	K7-37-5a	Taleh boz, Dareh khani	R. Dashet Roum (Tri. of Boshar)	21.5	30	40	54	51	18	47	42
364	K7-37-5b	Cheshmeh tagi , Cheshmeh baloutak, Cheshmeh surkh	R. Dashet Roum	39.0	30	36	56	51	24	8	42
365	K7-37-5c	Ali abad, Amir abad vasati	R. Dashet Roum	41.7	30	38	29	51	24	31	42
366	K7-37-5d	Habib abad dashte room, Mansur abad, Dolat abad	R. Dashet Roum	64.1	30	33	18	51	30	42	42, 62
367	K7-37-5e	-	R. Dashet Roum	48.2	30	30	6	51	30	52	40, 42, 59, 62
368	K7-37-5f	Kalle sareh dar	R. Dashet Roum	65.0	30	26	3	51	35	54	59
369	K7-37-5g	Par shekoft, Mele bariko, Gozali	R. Dashet Roum	25.5	30	29	37	51	35	4	59, 62
370	K7-37-6a	-	R. Sepidar (Tri. of Boshar)	23.2	30	40	39	51	17	6	42
371	K7-37-6b	Baghcheh	R. Sepidar	44.9	30	39	26	51	15	32	42, 43
372	K7-37-6c	Sepidar, Siseh gorg, Tangab, Bid barzeh, Vajestan	R. Sepidar	45.4	30	35	30	51	23	21	42
373	K7-37-6d	Bajouli, Bid miudan, Dareh kall salehi	R. Sepidar	44.6	30	35	13	51	21	14	42
374	K7-37-7a	Chaleh siseh	R. Sepidar	47.4	30	44	44	51	13	33	41, 42, 43, 44
375	K7-37-7b	-	R. Sepidar	34.7	30	47	51	51	10	36	44
376	K7-38	Cham khan, Cheshmeh chenar, Ganjeh	R. Boshar	69.8	30	43	47	51	32	13	41, 42, 62, 63
377	K7-39-1	Mehrabn	Tri. of Boshar	40.7	30	42	17	51	38	0	62
378	K7-39-2	Darehgav duli, Dareh saras khun	Tri. of Boshar	78.6	30	44	34	51	39	30	62, 63
379	K7-40	Dareh garu, Sar dashte kalous, Sarv bid	Tri. of Boshar	39.4	30	41	53	51	28	47	42, 62
380	K7-41-1	Bid shahi, Sarab taveh, Jakeh koreh	R. Boshar	51.1	30	36	24	51	32	41	62
381	K7-41-2	Chenarestan, Mour deraz	R. Boshar	66.4	30	36	15	51	35	59	62
382	K7-41-3	Ghasr abad	Tri. of Boshar	47.3	30	30	51	51	37	18	59, 62
383	K7-42-1	Yasuj faramarzi, Emam zadeh shahzadeh farajollah	R. Boshar	70.4	30	41	7	51	36	37	62
384	K7-42-2	-	Tri. of Boshar	30.8	30	35	40	51	45	39	61, 62
385	K7-43	Deh no, Mahmoud abad, Masoum abad	R. Boshar	34.2	30	38	28	51	38	48	62
386	K7-44	Dareh dareh	R. Boshar	64.4	30	34	60	51	41	40	62
387	K7-45	Vazag, Hamid abademam zadeh abdolah	R. Boshar	42.4	30	32	9	51	39	57	59, 62
388	K7-46	Dareh deli sefid	Tri. of Boshar	48.3	30	32	30	51	46	7	61, 62
389	K7-47	Cham kareh, Gardoo, Kandalak, Tange mallak abassi	Tri. of Boshar	47.0	30	30	9	51	46	42	57, 59, 61, 62
390	K7-48	Tange surkh, Deh toli, Cheshmeh chenar	R. Boshar	65.4	30	27	37	51	47	31	57, 59
391	K7-49	-	Gange gang, Sangan (Tri. of Boshar)	64.1	30	27	47	51	40	19	57, 59, 62
392	K7-50	Tange khushk, Tang mishan, Bar dozd	R. Boshar	69.9	30	24	43	51	47	34	57, 59
393	K7-51-1	-	Kalle Setengan (Tri. of Boshar)	63.9	30	21	14	51	43	58	57, 59
394	K7-51-2	Kalle setanga, Kalle shirkush	Kalle Shirkush (Tri. of Boshar)	51.2	30	24	1	51	42	40	57, 59
395	K7-52	Rigan, Barragh, Dokhtar kollun, Deh kohneh	R. Boshar	55.9	30	20	54	51	49	16	57
396	K7-53	Sheleh zar	R. Boshar	28.3	30	20	54	51	52	18	57
			Sub-total :	9,021.6							
	K8 (Main River ; Karoon)										
397	K8-1	-	S.A dam	60.5	32	5	19	49	39	3	9
398	K8-2	Darch chel shabeh, Darehe doshalvaroun	S.A dam	62.5	32	7	50	49	35	46	9
399	K8-3-1	-	Tange Shirkosk, Ahangari	46.7	32	13	29	49	34	23	9, 10
400	K8-3-2	Shalal	Ab. Shalal	34.5	32	17	22	49	32	43	9, 10
401	K8-3-3	Sabzab	Ab. Shalal	59.3	32	17	41	49	29	51	1, 2, 9, 10
402	K8-4	Nargesi, Takhet sabz, Joft balut, Taraz, Bard pareh, Dobalut, Solimanvandabe, Abe chel, Dehe chel, Abe khar zabre, Takhte sabz	S.A dam	116.6	32	9	39	49	41	50	9, 10
403	K8-5	Sar hauz balla & paien, Kertez, Ab khar zahreh, etc	Ab. Sarhouz	96.7	32	14	32	49	37	47	9, 10
404	K8-6-1a	Pirabass	Ab. Shala	20.9	32	15	54	49	41	16	9, 10
405	K8-6-1b	Deh jeraz	Ab. Shala	65.3	32	18	48	49	39	13	10
406	K8-6-1c	Saleh baroun	Ab. Shala	42.6	32	23	57	49	36	20	10
407	K8-6-1d	-	Ab. Shala	82.8	32	22	25	49	33	41	10
408	K8-6-1e	Stak, Kidi	Ab. Shala	87.7	32	29	27	49	30	20	1, 3, 10, 12
409	K8-6-2a	Chelcheli, Sarbazar, Terdi	Ab. Susan	62.1	32	19	9	49	45	59	7, 10
410	K8-6-2b	-	Ab. Susan	68.7	32	17	3	49	53	18	7, 8

No.	Sub-basin	Town / Village	River / Tributary	Area (km^2)	Coordinate						Map Reference
					Latitude			Longitude			
					d	m	s	d	m	s	
411	K8-6-2c	Muri	Ab. Susan	23.3	32	21	53	49	49	22	7
412	K8-6-2d	-	Ab. Susan	21.1	32	17	47	49	50	43	7
413	K8-6-2e	Sarbazar	Ab. Susan	27.2	32	22	10	49	46	21	7, 10
414	K8-6-3a	-	Tri. of Ab. Shala	50.3	32	22	3	49	41	1	10
415	K8-6-3b	Gachi, Babaziar	Tri. of Ab. Shala	73.2	32	26	38	49	41	49	10
416	K8-6-3c	Galalak, Chal gourab, Dareh kuh	Tri. of Ab. Shala	38.1	32	24	9	49	44	15	7, 10
417	K8-6-4	Retak, Lelar	Ab. Shala	62.7	32	27	25	49	37	10	10
418	K8-6-5	-	Ab. Shala	41.3	32	33	50	49	25	57	3
419	K8-6-6	Ienuk	Ab. Shala	83.6	32	31	39	49	34	16	3, 10, 12
420	K8-6-7	-	Ab. Shala	76.7	32	36	5	49	27	52	3, 12
421	K8-7-1a	Saleh, Dareh pir	Dareh Bardeh Nakhesh	71.2	32	15	36	49	48	11	7, 8, 10
422	K8-7-1b	-	Dareh Bardeh Nakhesh	21.2	32	10	10	49	52	7	8
423	K8-7-1c	-	Dareh Bardeh Nakhesh	38.4	32	7	46	49	56	11	8
424	K8-7-2	-	Dareh Bardeh Nakhesh	55.7	32	12	7	49	53	33	7, 8
425	K8-8	Dareh bardeh bachshi	Dareh Bardeh Nakhesh	29.9	32	14	20	49	44	57	7, 8, 9, 10
426	K8-9	-	Dareh Karta (Tri. of Karoon)	41.1	32	10	48	49	49	22	8
427	K8-10	Darak, Gol tardel	Karoon	56.0	32	7	27	49	46	40	8, 9
428	K8-11	Sar nafti, Bariyon	Karoon	75.3	32	8	48	49	47	51	8, 9
429	K8-12	Sardab, Vin abad, Mehrbano, Sarbozoom, Mehraban,	Karoon	75.7	32	1	32	49	48	50	4, 8
430	K8-13a	Pelam, Ta khab, etc.	Karoon	32.4	31	59	9	49	52	45	4, 8
431	K8-13b	Susan, Ceraya, Deh no, Ab zalu, Deh hoz, Deh kohneh, Gilan, Malviran, Abezaloo, Sorya, Emamzadeh danial, Soryya	Karoon	48.0	32	2	44	49	52	46	4, 8
432	K8-14	Bandi, Baraftab talkhab, Abni, Dehli chah hejazi	Tri. of Karoon	35.0	31	56	32	49	55	42	4
433	K8-15-1	Kol, Goft gale, Deh gohar almasi, Nonangnu	Karoon, Dareh Landar (Tri.	43.7	32	1	30	49	56	1	4, 8
434	K8-15-2	Tardab, Dareh landar	Dareh Landar	40.5	32	5	37	49	55	19	8
435	K8-16	Gachgan, Abanar, Kd ardode, Abeanar, Sar chat,	Karoon	47.1	31	55	31	49	59	37	4, 18
436	K8-17	Faram, Goft galeh, Chel hozan, Shiman, Safi, Dareh	Karoon	48.4	31	59	40	49	59	6	4, 8, 18, 21
437	K8-18-1	Falen, Patareh, Mobayeh, Dareh mombain	Dareh Mobayen (Tri. of Karoon)	86.5	32	0	51	50	1	40	8, 18, 21
438	K8-18-2	Dareh deli	Dareh Deli (Tri. of Dareh Mobayen)	76.5	32	2	48	50	3	29	8, 18, 21
439	K8-18-3	Ky magghusudi	R. Derazna (Dareh Mobayen)	32.5	31	56	47	50	6	10	18
440	K8-19a	Pastang, Darch chineh, Pole abdogh, Zango	Karoon	64.0	31	54	18	50	5	16	18
441	K8-19b	Dareh kcat	Karoon	42.3	31	52	8	50	8	22	18
442	K8-19c	Puzerak	Karoon	21.4	31	51	37	50	3	7	18
443	K8-20	Bar pareh	Karoon	46.2	31	49	37	50	7	33	18
444	K8-21	Badaumza, Chahr deh	Tri. of Karoon	79.9	31	48	26	50	2	24	4, 17, 18
445	K8-22	Bar pareh, Zir khu shalu	Karoon	19.3	31	46	42	50	6	17	17, 18
446	K8-23	Rekat shalu, Sebri	Karoon	73.0	31	48	43	50	11	13	15, 17, 18
447	K8-24	Baju shalu, Abe gonjeshki, Bonyab, Jalali	Karoon	65.1	31	42	43	50	6	32	17, 18
448	K8-25-1a	Shalu	Tri. of Karoon	37.0	31	45	2	50	11	27	17, 18
449	K8-25-1b	Dehdez, Lehbid, Ghaleh sard, Sarmasjed, Ghaleh balla sard	Tri. of Karoon	73.7	31	42	53	50	16	10	15, 16, 17, 18
450	K8-25-2	-	Tri. of Karoon	38.8	31	46	36	50	14	35	15, 17, 18
451	K8-26	Darch, Shalu, etc	Karoon	61.5	31	41	3	50	12	16	16, 17
452	K8-27	Mohamad, Poshte asiavand, Noshivand	Karoon	73.8	31	38	18	50	9	60	17
453	K8-28	Zeras, Shakhaz, Dareh zang, Morzi, Gerdlidan, Sarguf, Dehno	Karoon	63.7	31	36	47	50	17	56	16, 17
454	K8-29	Darb gharibi, Dehrudjeld, Jalali, Jir ahmad	Karoon	74.8	31	33	58	50	12	40	14, 16, 17
455	K8-30	Chaman, Deh nola, Bar aftab, Barez, Bare aftabe balla & paien, Bozorg, Jadvallekan, Dehe molla, Barjonakfalleh, Gore parviz	Karoon	80.0	31	32	45	50	17	17	16, 17
			Sub-total ;	3,273.6							
			Total Area:	26,811.8							

Inventory of Meteorology

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K1 (Main River ; Ab. Behesht Abad)							
K 1-1	46.0	621	61	17	9	1	1269
K 1-1-2	56.3	652	64	16	8	0	1193
K 1-1-3	61.7	658	66	16	8	0	1178
K 1-1-4	91.8	574	74	16	8	0	1145
K 1-1-5	74.8	652	79	17	9	1	1221
K 1-1-6	36.8	841	74	15	7	0	1121
K 1-1-7	72.4	760	77	15	7	-1	1111
K 1-1-8	55.6	837	74	15	7	-1	1111
K 1-2-1	38.4	621	61	16	8	1	1197
K 1-2-2	33.5	622	64	18	10	2	1313
K 1-2-3a	49.7	693	60	15	8	0	1135
K 1-2-3b	45.5	639	59	16	9	1	1217
K 1-2-3c	79.8	516	54	16	8	0	1164
K 1-2-3d	61.8	478	54	16	8	0	1173
K 1-2-4a	29.5	600	59	16	8	1	1207
K 1-2-4b	46.3	629	62	17	9	1	1231
K 1-2-5a	71.3	408	57	16	8	0	1188
K 1-2-5b	83.1	408	55	17	9	1	1221
K 1-2-5c	56.6	408	57	16	8	0	1188
K 1-2-5d	52.7	408	57	16	8	1	1207
K 1-2-5e	41.7	408	55	16	8	0	1173
K 1-2-5f	32.5	404	64	16	9	1	1217
K 1-2-5g	71.4	384	66	16	9	1	1217
K 1-2-5h	71.0	256	63	17	9	1	1255
K 1-2-5i	53.4	251	61	17	9	1	1250
K 1-2-5j	55.8	270	52	17	9	1	1236
K 1-2-5k	72.0	264	51	16	8	0	1188
K 1-2-5l	49.9	378	115	18	10	2	1322
K 1-2-5m	86.6	378	115	17	9	1	1265
K 1-2-5n	90.2	305	84	18	10	2	1308
K 1-2-5o	56.9	384	103	18	10	2	1322
K 1-2-5p	70.1	382	107	18	10	2	1317
K 1-2-5q	53.0	393	85	18	10	2	1317
K 1-2-5r	70.2	408	55	17	9	2	1279
K 1-2-5s	55.5	408	57	16	8	0	1178
K 1-2-5t	71.7	408	55	17	9	1	1241
K 1-2-5u	74.4	391	52	18	10	2	1332
K 1-2-6a	62.2	336	51	18	10	2	1332
K 1-2-6b	50.0	433	54	17	9	1	1221
K 1-2-6c	84.9	319	51	18	10	2	1346
K 1-2-6d	66.3	355	51	16	9	1	1212
K 1-2-6e	68.3	360	51	17	9	1	1245
K 1-2-6f	72.9	349	51	17	9	1	1231
K 1-2-6g	53.8	319	51	18	10	2	1317
K 1-2-6h	88.3	319	50	17	9	1	1260
K 1-2-6i	71.2	320	49	18	10	2	1322
K 1-2-6j	87.7	331	44	18	10	2	1303
K 1-2-6k	66.6	331	44	16	8	0	1164
K 1-2-6l	61.1	589	61	16	8	0	1178
K 1-2-6m	47.6	384	53	18	10	2	1346
K 1-2-6n	95.7	321	49	18	10	2	1337
K 1-2-6o	94.0	337	44	17	9	2	1284
K 1-2-6p	43.6	332	44	17	9	1	1260
K 1-2-6q	73.7	443	44	16	9	1	1212
K 1-2-6r	47.4	333	44	17	9	1	1241
K 1-3	77.1	662	64	16	8	0	1173
K 1-4-1	26.4	541	78	18	10	2	1293
K 1-4-2a	63.7	527	69	17	9	1	1226
K 1-4-2b	33.5	337	46	18	10	2	1337
K 1-4-2c	56.8	586	64	18	10	2	1317

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K 1-4-2d	68.4	840	67	17	9	1	1226
K 1-4-2e	67.9	698	79	17	9	1	1260
K 1-4-3	71.0	741	78	16	8	0	1169
K2 (Main River ; Ab. Kurang)							
K2-1	53.5	627	64	17	9	1	1269
K2-2	43.8	622	65	19	11	3	1375
K2-3	95.3	617	67	17	9	1	1245
K2-4	42.1	680	89	18	10	2	1293
K2-5-1a	86.3	827	79	16	9	1	1217
K2-5-1b	79.0	804	74	15	8	0	1140
K2-5-2	31.9	827	93	15	7	-1	1116
K2-5-3	37.6	827	93	14	6	-2	1025
K2-5-4	47.1	822	82	15	7	-1	1092
K2-6	36.9	683	75	16	8	0	1159
K2-7	49.7	827	74	16	8	0	1159
K2-8	35.0	827	74	14	6	-2	996
K2-9	79.4	806	74	14	7	-1	1063
K2-10	48.5	800	74	14	6	-1	1049
K2-10a	97.2	744	47	13	5	-3	945
K2-11	58.4	788	44	15	7	-1	1082
K2-12	55.7	851	33	12	4	-4	866
K2-13	61.3	951	33	13	5	-3	919
K2-14	63.0	979	33	12	4	-3	890
K2-15	39.7	946	33	14	6	-2	991
K2-16	82.3	1282	33	12	4	-4	861
K3 (Main River ; Middle Karoon)							
K3-0a	74.2	546	43	23	15	7	1692
K3-0b	72.3	524	43	23	15	7	1687
K3-0c	60.2	644	43	22	14	6	1634
K 3-1-1	49.1	508	43	22	14	6	1668
K 3-1-2	38.5	508	43	23	15	7	1707
K 3-1-3	47.2	604	39	23	15	7	1721
K 3-1-4	45.2	618	38	22	14	6	1673
K 3-1-5	95.8	603	38	20	12	4	1490
K 3-1-6	47.4	620	38	20	12	4	1462
K 3-1-7	87.0	620	45	20	12	4	1447
K 3-1-8	37.7	620	43	20	12	4	1495
K 3-1-9	73.7	617	50	18	10	2	1327
K 3-1-10	53.8	631	57	18	10	2	1313
K 3-1-11	55.1	705	60	18	10	2	1303
K 3-1-12	64.8	680	60	18	10	2	1351
K 3-1-13	40.9	699	60	20	12	4	1471
K 3-1-13a	40.0	709	60	20	12	4	1447
K 3-1-14a	45.6	630	62	19	11	3	1418
K 3-1-14b	68.1	570	89	14	6	-2	1034
K 3-1-15	45.0	621	88	19	11	4	1438
K 3-1-16	52.2	589	93	14	6	-2	1015
K 3-1-17	59.0	611	93	17	9	1	1260
K 3-1-18	45.4	801	93	15	7	-1	1087
K 3-1-19	53.7	766	93	14	6	-1	1049
K 3-2-1	49.6	601	39	22	14	6	1610
K 3-2-2	63.5	619	53	18	10	2	1351
K 3-2-3	48.9	536	59	19	11	3	1375
K 3-2-4	45.0	509	43	20	12	4	1505
K 3-2-5	42.9	508	61	18	11	3	1366
K 3-2-6	33.5	587	60	18	10	2	1298
K 3-2-7	59.8	538	68	16	8	1	1202
K 3-3-1	43.1	667	60	20	12	4	1452
K 3-3-2a	60.4	709	60	17	9	1	1255
K 3-3-2b	49.3	648	56	16	8	0	1183
K 3-3-2c	59.2	567	50	14	6	-1	1049
K 3-3-2d	58.4	560	50	13	6	-2	981

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K 3-3-2e	33.2	709	60	19	11	3	1385
K 3-3-2f	38.8	709	60	16	8	1	1202
K 3-3-2g	65.7	621	54	15	7	-1	1111
K 3-3-2h	55.9	560	50	14	6	-2	991
K 3-3-3a	53.1	634	60	17	9	1	1226
K 3-3-3b	58.1	709	60	17	9	1	1221
K 3-4-1	49.8	621	60	21	13	5	1538
K 3-4-2	62.7	621	87	19	11	3	1414
K 3-4-3	25.9	621	74	18	11	3	1366
K 3-5	37.8	576	93	14	7	-1	1058
K 3-6	62.7	652	93	15	8	0	1130
K4 (Main River ; Ab. Vanak)							
K4-1-1	62.6	625	52	18	11	3	1366
K4-1-2	66.5	556	59	16	8	1	1207
K4-1-3	56.0	649	64	16	8	0	1193
K4-1-4	62.6	669	65	16	8	0	1188
K4-1-5	109.1	555	68	16	8	0	1173
K4-1-6	55.9	1084	59	17	9	2	1284
K4-1-7	51.7	1573	52	17	9	1	1274
K4-1-7a	139.9	1166	59	15	7	-1	1116
K4-1-7b	84.6	382	71	17	9	1	1241
K4-1-7c	105.7	359	73	16	8	0	1164
K4-1-7d	83.0	420	74	15	8	0	1140
K4-1-7e	52.9	401	66	15	7	0	1121
K4-1-7f	98.7	390	61	13	5	-3	952
K4-1-7g	76.9	374	73	18	10	2	1308
K4-1-7h	73.0	420	74	17	9	1	1226
K4-1-7i	71.3	416	72	14	7	-1	1053
K4-1-7j	96.2	405	68	13	5	-2	967
K4-1-7k	52.4	420	74	16	8	0	1149
K4-1-7l	80.0	351	72	15	7	-1	1082
K4-1-7m	161.2	388	70	15	7	-1	1106
K4-1-7n	121.4	571	64	16	8	0	1169
K4-1-8	110.6	842	60	16	8	1	1202
K4-1-8a	93.3	571	64	17	9	1	1226
K4-1-8b	70.3	571	64	16	9	1	1212
K4-1-9	67.0	593	54	14	6	-1	1044
K4-1-10	97.7	389	56	16	8	0	1173
K4-1-11	143.4	484	52	14	6	-1	1044
K4-1-12	69.4	482	54	16	8	0	1183
K4-1-13	104.2	560	50	14	6	-2	1010
K4-1-14	101.9	560	50	13	6	-2	981
K4-1-15	39.5	669	57	15	8	0	1140
K4-2-1	66.2	560	56	12	4	-4	866
K4-3-1	72.5	868	60	16	8	0	1178
K4-3-2	71.8	1582	52	16	9	1	1212
K4-4-1	48.6	632	66	16	8	0	1164
K4-4-1a	51.7	552	62	15	7	-1	1101
K4-4-1b	40.8	389	60	15	7	-1	1116
K4-4-2a	41.8	426	74	15	7	-1	1092
K4-4-2b	94.8	419	74	15	7	-1	1097
K4-4-3	67.7	390	61	15	7	0	1121
K5 (Main River ; Bazoft)							
K5-1	36.2	508	43	24	16	8	1783
K5-2	55.9	509	43	22	14	6	1673
K5-3	47.2	508	43	21	13	5	1577
K5-4	70.4	537	72	18	10	2	1342
K5-5	71.3	556	59	21	13	5	1558
K5-6	64.3	557	93	18	10	2	1337
K5-7	30.9	557	93	20	12	4	1476
K5-8	21.1	559	93	20	12	4	1471
K5-9	17.8	557	93	19	11	3	1418

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K5-10	63.5	688	93	19	11	3	1423
K5-11	52.4	557	93	16	8	1	1197
K5-12	63.0	727	93	20	12	4	1457
K5-13-1a	32.3	574	93	18	10	2	1317
K5-13-1b	52.1	827	93	13	5	-3	933
K5-13-2	35.4	557	93	15	7	0	1125
K5-14	31.5	751	93	20	12	4	1452
K5-15	42.4	830	93	18	10	2	1317
K5-16	53.5	915	93	19	11	3	1423
K5-17	92.6	778	87	18	10	2	1293
K5-18	22.0	894	93	22	14	6	1630
K5-19	52.9	906	93	18	11	3	1366
K5-19a	75.2	939	62	18	10	2	1322
K5-20	71.9	744	73	15	7	0	1121
K5-21	43.3	744	54	15	7	0	1121
K5-22	61.6	1434	33	18	10	2	1322
K5-23	69.2	983	33	15	7	0	1121
K5-24	46.7	1459	33	20	12	4	1457
K5-25	57.9	1463	33	17	9	1	1250
K5-26	91.7	1335	33	14	7	-1	1058
K5-27	69.4	1459	33	15	7	-1	1116
K5-28	33.8	1474	33	20	12	4	1505
K5-29-1	33.9	1474	33	20	12	4	1447
K5-29-2	62.6	1474	33	14	7	-1	1063
K5-29-3	28.8	1474	33	19	11	3	1390
K5-29-4	67.5	1474	33	14	6	-2	1015
K5-30	82.1	1474	33	18	10	2	1356
K5-31-1	29.0	1474	33	19	11	3	1380
K5-31-2	34.6	1474	33	16	8	0	1164
K5-32-1	57.4	1474	33	18	10	2	1322
K5-32-2	68.1	1474	33	16	8	1	1197
K5-33	81.5	1474	33	16	8	0	1149
K6 (Main River : Lordegan)							
K6-1-1	66.7	600	43	22	14	6	1606
K6-1-2	71.3	575	42	20	12	5	1519
K6-1-3	74.5	554	38	21	13	5	1582
K6-1-4	54.8	521	38	20	12	4	1462
K6-1-5	62.8	521	38	20	12	4	1495
K6-1-6	56.9	605	42	19	11	3	1423
K6-1-7	104.6	580	59	18	10	2	1303
K6-1-8	104.7	555	60	19	11	3	1433
K6-1-9	53.4	653	64	18	10	2	1308
K6-1-10	78.8	604	62	17	9	2	1284
K6-2	66.5	525	38	20	12	4	1476
K6-3-1	70.0	565	38	18	10	2	1356
K6-3-2	58.7	589	40	15	7	-1	1101
K6-4-1	130.7	580	38	17	9	2	1284
K6-4-2	69.5	616	55	18	10	2	1313
K6-4-3	78.4	623	50	16	8	0	1173
K6-4-4	71.9	580	58	15	7	-1	1116
K6-4-5	79.3	543	58	17	9	1	1241
K6-5-1	65.0	635	51	18	10	2	1332
K6-6-1	55.8	587	59	18	10	2	1308
K7 (Main River : Khersan)							
K7-0-1	26.9	540	55	21	13	5	1577
K7-0-2	29.8	540	55	20	12	4	1514
K7-0-3	115.4	540	55	17	9	2	1279
K7-0-4	53.4	540	55	20	12	4	1510
K7-0-5	34.2	540	55	19	11	3	1428
K7-0-5-1a	54.9	540	55	19	11	3	1428
K7-0-5-1b	45.3	540	55	18	10	2	1308
K7-0-5-2	70.0	540	55	19	11	3	1385

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K7-0-5-3	82.3	540	55	18	10	2	1308
K7-0-5-4	36.0	540	55	18	10	2	1337
K7-0-5-5	87.0	638	63	16	8	0	1159
K7-0-6	59.1	532	55	15	7	0	1125
K7-0-6a	33.8	535	57	14	6	-1	1039
K7-0-7	44.6	479	67	19	11	3	1409
K7-0-8	68.7	361	82	14	6	-2	996
K7-0-9	68.0	289	68	14	6	-2	991
K7-0-10-1	14.3	354	91	20	12	4	1457
K7-0-10-2	65.5	353	86	18	10	2	1356
K7-0-10-3a	46.5	493	64	19	11	3	1370
K7-0-10-3b	48.9	540	55	16	8	1	1202
K7-0-10-4	54.5	371	82	19	12	4	1442
K7-0-10-5a	67.3	399	60	16	8	1	1202
K7-0-10-5b	85.3	482	57	16	8	0	1188
K7-0-10-6a	49.6	345	57	18	10	2	1293
K7-0-10-6b	62.0	336	62	17	9	1	1274
K7-0-10-6c	61.4	340	66	16	8	1	1202
K7-0-10-6d	60.4	354	64	15	8	0	1135
K7-0-10-6e	48.6	388	60	14	7	-1	1053
K7-0-10-6f	32.9	344	57	17	9	1	1245
K7-0-10-6g	91.5	344	57	16	8	1	1197
K7-0-10-6h	93.4	332	64	16	8	0	1193
K7-0-10-6i	31.1	330	66	16	9	1	1217
K7-0-10-6j	52.2	326	68	15	8	0	1140
K7-0-10-6k	68.1	326	68	16	8	1	1202
K7-0-10-6l	67.4	326	68	16	8	0	1183
K7-0-10-6m	26.0	326	68	15	7	0	1121
K7-0-10-6n	60.9	373	62	14	6	-1	1044
K7-0-10-6o	33.3	380	61	14	6	-2	1034
K7-0-10-6p	56.3	326	68	16	8	0	1188
K7-0-10-6q	73.9	333	64	15	8	0	1140
K7-0-10-6r	70.0	359	62	16	8	0	1145
K7-0-10-6s	81.9	326	68	15	7	-1	1082
K7-0-10-6t	61.6	326	68	15	7	-1	1087
K7-0-10-7	105.3	388	60	17	9	1	1245
K7-0-10-8	98.9	374	60	17	9	2	1284
K7-0-10-9	124.4	388	60	16	8	0	1154
K7-0-11	26.4	354	91	20	12	4	1457
K7-0-12	39.7	354	91	19	11	3	1375
K7-0-13-1	58.3	351	81	18	10	2	1317
K7-0-13-2	47.5	354	91	18	10	2	1337
K7-0-14-1	50.0	361	90	17	9	1	1231
K7-0-14-2	29.3	353	87	18	10	2	1313
K7-0-14-3	69.4	356	85	17	9	1	1241
K7-0-14-4	202.7	409	57	16	8	0	1173
K7-0-14-5	161.2	508	58	16	8	0	1149
K7-0-15	34.0	283	67	15	7	-1	1101
K7-0-16	74.3	247	55	13	5	-2	957
K7-0-17	69.4	280	66	17	9	1	1226
K7-0-18	74.7	553	61	16	8	1	1197
K7-0-19-1	63.1	755	73	13	5	-2	972
K7-0-19-2	51.2	499	64	12	4	-4	852
K7-0-20a	72.8	870	70	13	5	-3	928
K7-0-20b	57.1	906	69	12	5	-3	895
K7-0-21	117.1	557	58	16	8	1	1207
K7-0-22	54.0	846	67	13	6	-2	981
K7-0-23	48.9	575	59	14	7	-1	1053
K7-0-24	81.5	522	57	16	8	0	1154
K7-1	67.6	644	43	21	13	5	1534
K7-2	70.2	644	43	23	15	7	1735
K7-3	32.4	644	43	22	14	6	1659

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K7-4	50.6	638	43	23	15	7	1711
K7-5-1	66.5	618	42	21	13	5	1596
K7-5-2	54.9	644	43	21	13	5	1558
K7-5-3	54.1	644	43	20	12	4	1457
K7-5-4	66.5	575	40	19	11	3	1433
K7-5-5	58.2	580	38	18	10	2	1332
K7-5-6	30.3	580	38	19	11	3	1370
K7-6-1	56.4	553	39	20	12	5	1519
K7-6-2	75.9	574	41	18	10	2	1327
K7-7	35.4	533	38	22	14	6	1659
K7-8	38.4	601	41	21	13	5	1543
K7-9	62.5	521	38	21	13	5	1567
K7-10	37.7	545	38	20	12	4	1514
K7-11	64.7	568	38	21	13	5	1577
K7-12-1	30.7	580	38	20	12	4	1462
K7-12-2	58.2	556	50	18	10	2	1327
K7-12-3	22.2	579	40	18	10	2	1327
K7-13	33.1	580	39	20	12	4	1514
K7-14	61.3	580	38	20	12	4	1457
K7-15	37.5	576	42	19	11	4	1438
K7-16	54.4	546	54	19	11	3	1423
K7-17	79.4	579	47	17	9	1	1226
K7-18	73.5	540	55	18	10	2	1313
K7-19	26.5	540	55	19	11	3	1380
K7-20	49.7	540	55	19	11	3	1385
K7-21	42.0	540	55	19	11	3	1394
K7-22	42.8	540	55	21	13	5	1534
K7-23	30.5	528	62	20	12	4	1505
K7-24-1	51.5	521	66	18	10	2	1342
K7-24-2	37.1	540	55	16	8	1	1207
K7-24-3	26.8	527	63	19	11	3	1394
K7-24-4	26.5	540	55	16	8	0	1154
K7-25	67.4	532	60	20	12	4	1495
K7-26	35.9	516	70	16	8	0	1154
K7-27	23.1	515	70	21	13	5	1543
K7-28	73.2	515	70	14	7	-1	1063
K7-29	60.4	481	68	15	7	-1	1068
K7-30	48.9	515	70	19	11	3	1370
K7-31	56.8	511	67	20	12	4	1510
K7-32-1	79.8	535	54	14	6	-2	1015
K7-32-2	27.4	467	64	14	7	-1	1063
K7-33	33.7	481	44	20	12	4	1490
K7-34-1	56.0	504	61	20	12	4	1476
K7-34-2	27.1	515	70	19	11	3	1423
K7-35-1	83.7	550	50	19	11	3	1370
K7-35-2	67.4	527	69	17	9	1	1255
K7-35-3	33.9	736	54	19	11	3	1399
K7-36-1	61.8	565	45	20	12	4	1452
K7-36-2	42.5	637	47	20	12	4	1471
K7-36-3	29.8	722	92	19	11	3	1409
K7-36-3a	57.9	735	59	14	6	-2	1025
K7-36-3b	34.1	781	68	16	8	1	1197
K7-36-3c	42.8	842	76	12	5	-3	904
K7-36-4	70.1	636	43	19	11	3	1385
K7-36-5	52.2	845	72	15	7	-1	1073
K7-37-1	25.5	577	48	21	13	5	1524
K7-37-2	33.7	611	50	21	13	5	1524
K7-37-3	30.0	809	57	19	11	3	1428
K7-37-4a	50.1	799	58	20	12	4	1447
K7-37-4b	50.2	746	88	19	11	3	1375
K7-37-5a	21.5	809	57	19	11	3	1423
K7-37-5b	38.9	832	66	17	10	2	1289

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean *Maximum* Daily Rainfall (mm)	Mean *Maximum* Temperature (° C)	Mean Annual Temperature (° C)	Mean *Minimum* Temperature (° C)	Annual Evaporation (mm)
K7-37-5c	41.7	774	75	18	10	3	1361
K7-37-5d	64.1	971	52	17	9	2	1279
K7-37-5e	48.2	971	52	18	10	2	1308
K7-37-5f	65.0	971	52	17	9	1	1255
K7-37-5g	25.5	971	52	17	9	1	1265
K7-37-6a	23.2	809	57	19	11	3	1423
K7-37-6b	44.9	809	57	17	9	1	1260
K7-37-6c	45.4	898	55	17	9	2	1284
K7-37-6d	44.6	869	55	18	10	2	1298
K7-37-7a	47.3	809	57	17	9	1	1269
K7-37-7b	34.7	797	57	16	8	0	1173
K7-38	69.7	759	86	17	9	1	1241
K7-39-1	40.7	855	61	17	9	1	1255
K7-39-2	78.6	888	65	13	5	-3	948
K7-40	39.4	713	87	20	12	4	1471
K7-41-1	51.1	842	72	20	12	4	1457
K7-41-2	66.4	891	52	19	11	3	1433
K7-41-3	47.3	971	52	17	9	2	1284
K7-42-1	70.4	863	58	17	9	1	1245
K7-42-2	30.8	851	42	16	8	0	1149
K7-43	34.2	885	50	18	10	2	1308
K7-44	64.4	879	48	17	9	2	1279
K7-45	42.4	932	50	17	9	1	1274
K7-46	48.3	844	40	17	9	1	1255
K7-47	47.0	844	40	17	10	2	1289
K7-48	65.4	844	40	16	8	0	1178
K7-49	64.1	910	46	17	9	1	1236
K7-50	69.9	844	40	16	8	0	1169
K7-51-1	63.9	869	42	17	9	1	1245
K7-51-2	51.2	867	42	17	9	1	1236
K7-52	55.9	844	40	16	8	0	1145
K7-53	28.3	844	40	15	7	0	1121
K8 (Main River ; Karoon)							
K8-1	60.5	579	37	26	17	9	1908
K8-2	62.5	579	33	27	19	11	2004
K8-3-1	46.7	575	33	26	18	10	1947
K8-3-2	34.5	532	33	23	15	7	1731
K8-3-3	59.3	517	33	25	17	9	1865
K8-4	116.6	590	33	26	18	10	1937
K8-5	96.7	580	33	25	17	9	1872
K8-6-1a	20.9	848	33	23	15	7	1731
K8-6-1b	65.3	1096	33	24	16	8	1827
K8-6-1c	42.5	1465	33	26	17	9	1908
K8-6-1d	82.8	689	33	22	14	6	1630
K8-6-1e	87.7	798	33	21	13	5	1572
K8-6-2a	62.1	1474	33	25	17	9	1841
K8-6-2b	68.7	1474	33	20	12	4	1471
K8-6-2c	23.3	1474	33	22	14	6	1615
K8-6-2d	21.1	1474	33	22	14	6	1639
K8-6-2e	27.2	1474	33	22	14	6	1654
K8-6-3a	50.3	1474	33	25	17	9	1870
K8-6-3b	73.2	1474	33	20	12	5	1519
K8-6-3c	38.1	1474	33	21	13	5	1567
K8-6-4	62.7	1474	33	21	13	5	1591
K8-6-5	41.3	545	33	17	9	1	1255
K8-6-6	83.6	1334	33	17	9	1	1269
K8-6-7	76.7	545	33	16	8	1	1202
K8-7-1a	71.2	1441	33	24	16	8	1769
K8-7-1b	21.2	916	36	20	12	4	1495
K8-7-1c	38.4	916	72	16	8	1	1207
K8-7-2	55.7	1127	33	20	12	4	1457
K8-8	29.9	1195	33	26	17	9	1903

Sub-basin No.	Catchment Area (km^2)	Mean Annual Rainfall (mm)	Mean Maximum Daily Rainfall (mm)	Mean Maximum Temperature (° C)	Mean Annual Temperature (° C)	Mean Minimum Temperature (° C)	Annual Evaporation (mm)
K8-9	41.1	921	33	23	15	7	1740
K8-10	56.0	858	44	26	18	10	1937
K8-11	75.3	916	50	23	15	7	1726
K8-12	75.7	671	92	25	17	9	1877
K8-13a	32.4	779	93	25	17	9	1894
K8-13b	48.0	916	93	23	15	7	1716
K8-14	35.0	638	93	23	15	7	1735
K8-15-1	43.7	916	93	23	15	7	1745
K8-15-2	40.5	916	90	20	12	5	1519
K8-16	47.1	595	93	25	17	9	1865
K8-17	48.4	909	93	23	15	7	1692
K8-18-1	86.5	909	93	21	13	5	1524
K8-18-2	76.4	909	93	19	11	3	1418
K8-18-3	32.5	815	93	21	13	5	1534
K8-19a	64.0	731	93	21	13	5	1582
K8-19b	42.3	752	93	21	13	5	1538
K8-19c	21.4	707	93	25	17	9	1884
K8-20	46.2	767	93	21	13	5	1538
K8-21	79.9	705	92	21	13	5	1553
K8-22	19.3	776	93	25	17	9	1884
K8-23	73.0	706	93	21	13	5	1529
K8-24	65.1	776	51	21	13	5	1548
K8-25-1a	37.0	708	72	22	14	6	1639
K8-25-1b	73.7	569	43	21	13	5	1529
K8-25-2	38.7	614	85	20	12	4	1495
K8-26	61.5	679	43	24	16	8	1807
K8-27	73.8	731	43	20	12	4	1505
K8-28	63.7	575	43	24	16	8	1807
K8-29	74.8	665	43	20	12	4	1476
K8-30	80.0	644	43	20	12	4	1457

Inventory of Hydrology/Water Use

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K1 (Main River ; Ab. Behesht Abad)							
K 1-1	28,566	9,451	205	2.5	33.1	2,393	116
K 1-1-2	36,708	12,443	221	2.7	33.9	5,100	177
K 1-1-3	40,599	13,897	225	2.8	34.2	5,782	198
K 1-1-4	52,693	18,500	202	2.5	35.1	6,325	254
K 1-1-5	48,770	16,994	227	2.8	34.8	3,397	1,435
K 1-1-6	30,949	10,319	280	3.5	33.3	1,469	73
K 1-1-7	55,024	19,399	268	3.3	35.3	3,003	166
K 1-1-8	46,537	16,143	290	3.6	34.7	2,268	127
K 1-2-1	23,846	7,752	202	2.5	32.5	3,614	97
K 1-2-2	20,837	6,686	200	2.5	32.1	3,258	95
K 1-2-3a	34,442	11,603	233	2.9	33.7	4,482	120
K 1-2-3b	29,075	9,635	212	2.6	33.1	4,248	111
K 1-2-3c	41,177	14,115	177	2.2	34.3	7,384	193
K 1-2-3d	29,540	9,805	159	2.0	33.2	4,515	89
K 1-2-4a	17,700	5,590	189	2.3	31.6	2,747	72
K 1-2-4b	29,123	9,653	208	2.6	33.1	4,326	114
K 1-2-5a	29,090	9,641	135	1.7	33.1	6,485	421
K 1-2-5b	33,905	11,405	137	1.7	33.6	7,458	179
K 1-2-5c	23,093	7,484	132	1.6	32.4	4,226	93
K 1-2-5d	21,502	6,920	131	1.6	32.2	4,788	114
K 1-2-5e	17,014	5,353	128	1.6	31.5	2,540	67
K 1-2-5f	13,130	4,028	124	1.5	30.7	605	28
K 1-2-5g	27,418	9,035	127	1.6	33.0	557	45
K 1-2-5h	18,176	5,755	81	1.0	31.7	510	44
K 1-2-5i	13,403	4,121	77	1.0	30.7	284	33
K 1-2-5j	15,066	4,684	84	1.0	31.1	320	1,896
K 1-2-5k	19,008	6,045	84	1.0	31.8	379	42
K 1-2-5l	18,862	5,994	120	1.5	31.8	273	574
K 1-2-5m	32,735	10,974	127	1.6	33.5	462	53
K 1-2-5n	27,511	9,069	101	1.2	33.0	510	56
K 1-2-5o	21,850	7,043	124	1.5	32.2	308	35
K 1-2-5p	26,778	8,804	126	1.5	32.9	379	43
K 1-2-5q	20,829	6,683	126	1.6	32.1	249	28
K 1-2-5r	28,642	9,478	135	1.7	33.1	794	44
K 1-2-5s	22,644	7,325	132	1.6	32.3	818	44
K 1-2-5t	29,254	9,701	135	1.7	33.2	1,470	311
K 1-2-5u	29,090	9,641	130	1.6	33.1	6,377	155
K 1-2-6a	20,899	6,708	108	1.3	32.1	3,318	120
K 1-2-6b	21,650	6,973	139	1.7	32.2	2,919	101
K 1-2-6c	27,083	8,914	105	1.3	32.9	2,812	844
K 1-2-6d	23,537	7,642	115	1.4	32.5	1,946	1,100
K 1-2-6e	24,588	8,017	117	1.4	32.6	1,884	74
K 1-2-6f	25,442	8,323	114	1.4	32.7	1,888	74
K 1-2-6g	17,162	5,404	100	1.2	31.5	1,476	59
K 1-2-6h	28,168	9,306	105	1.3	33.0	2,403	95
K 1-2-6i	22,784	7,374	104	1.3	32.4	1,965	4,002
K 1-2-6j	29,029	9,619	110	1.4	33.1	2,520	98
K 1-2-6k	22,045	7,112	107	1.3	32.3	2,909	107
K 1-2-6l	35,988	12,176	199	2.5	33.8	2,822	117
K 1-2-6m	18,278	5,791	122	1.5	31.7	2,141	90
K 1-2-6n	30,720	10,235	107	1.3	33.3	2,880	113
K 1-2-6o	31,678	10,586	113	1.4	33.4	2,559	103
K 1-2-6p	14,475	4,483	103	1.3	31.0	1,245	53
K 1-2-6q	32,649	10,942	148	1.8	33.5	3,007	111
K 1-2-6r	15,784	4,930	104	1.3	31.2	2,082	76
K 1-3	51,040	17,864	232	2.9	35.0	7,315	820
K 1-4-1	14,282	4,418	167	2.1	30.9	2,183	80
K 1-4-2a	33,570	11,281	177	2.2	33.6	1,228	503
K 1-4-2b	11,290	3,413	102	1.3	30.2	654	59
K 1-4-2c	33,285	11,176	197	2.4	33.6	1,010	96
K 1-4-2d	57,456	20,342	297	3.7	35.4	195	22

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K 1-4-2e	47,394	16,469	243	3.0	34.7	1,114	107
K 1-4-3	52,611	18,468	260	3.2	35.1	1,320	117
K2 (Main River ; Ab. Kurang)							
K2-1	33,545	11,272	211	2.6	33.6	1,179	161
K2-2	27,244	8,972	205	2.5	32.9	966	58
K2-3	58,800	20,864	219	2.7	35.5	2,310	31
K2-4	28,628	9,473	225	2.8	33.1	790	29
K2-5-1a	71,370	25,805	299	3.7	36.2	1,414	11
K2-5-1b	63,516	22,707	287	3.5	35.8	1,391	13
K2-5-2	26,381	8,661	271	3.3	32.8	495	16
K2-5-3	31,095	10,372	276	3.4	33.4	613	59
K2-5-4	38,716	13,192	280	3.5	34.1	778	36
K2-6	25,203	8,237	223	2.8	32.7	813	18
K2-7	41,102	14,087	283	3.5	34.3	1,096	35
K2-8	28,945	9,588	274	3.4	33.1	919	21
K2-9	63,996	22,896	288	3.6	35.8	1,468	41
K2-10	38,800	13,223	273	3.4	34.1	896	26
K2-10a	72,317	26,181	269	3.3	36.2	1,699	24
K2-11	46,019	15,946	273	3.4	34.6	1,084	22
K2-12	47,401	16,472	296	3.6	34.7	1,033	25
K2-13	58,296	20,668	337	4.2	35.5	879	17
K2-14	61,677	21,987	349	4.3	35.6	1,016	32
K2-15	37,556	12,759	321	4.0	34.0	734	81
K2-16	105,509	39,623	481	5.9	37.6	1,340	105
K3 (Main River ; Middle Karoon)							
K3-0a	40,513	13,865	187	2.3	34.2	481	81
K3-0b	37,885	12,882	178	2.2	34.0	673	105
K3-0c	38,769	13,212	219	2.7	34.1	208	51
K 3-1-1	24,943	8,144	166	2.0	32.7	128	31
K 3-1-2	19,558	6,237	162	2.0	31.9	208	31
K 3-1-3	28,509	9,430	200	2.5	33.1	385	41
K 3-1-4	27,934	9,221	204	2.5	33.0	866	47
K 3-1-5	57,767	20,463	214	2.6	35.4	2,341	106
K 3-1-6	29,388	9,749	206	2.5	33.2	1,154	53
K 3-1-7	53,940	18,980	218	2.7	35.2	2,068	96
K 3-1-8	23,374	7,584	201	2.5	32.4	802	39
K 3-1-9	45,473	15,738	214	2.6	34.6	673	46
K 3-1-10	33,948	11,421	212	2.6	33.6	433	37
K 3-1-11	38,846	13,241	240	3.0	34.1	353	36
K 3-1-12	44,064	15,204	235	2.9	34.5	417	43
K 3-1-13	28,589	9,459	231	2.9	33.1	257	27
K 3-1-13a	28,360	9,376	234	2.9	33.1	224	28
K 3-1-14a	28,728	9,510	209	2.6	33.1	289	30
K 3-1-14b	38,817	13,230	194	2.4	34.1	305	51
K 3-1-15	27,945	9,226	205	2.5	33.0	326	19
K 3-1-16	30,746	10,245	196	2.4	33.3	382	20
K 3-1-17	36,049	12,199	207	2.5	33.8	439	22
K 3-1-18	36,365	12,316	271	3.3	33.9	354	17
K 3-1-19	41,134	14,099	263	3.2	34.3	396	20
K 3-2-1	29,810	9,903	200	2.5	33.2	208	42
K 3-2-2	39,307	13,413	211	2.6	34.1	240	53
K 3-2-3	26,210	8,599	176	2.2	32.8	144	40
K 3-2-4	22,905	7,417	165	2.0	32.4	128	37
K 3-2-5	21,793	7,023	164	2.0	32.2	128	34
K 3-2-6	19,665	6,274	187	2.3	31.9	112	27
K 3-2-7	32,172	10,767	180	2.2	33.5	192	48
K 3-3-1	28,748	9,517	221	2.7	33.1	970	40
K 3-3-2a	42,824	14,735	244	3.0	34.4	1,387	26
K 3-3-2b	31,946	10,684	217	2.7	33.4	1,353	18
K 3-3-2c	33,566	11,280	191	2.3	33.6	1,669	20
K 3-3-2d	32,704	10,963	188	2.3	33.5	2,526	25
K 3-3-2e	23,539	7,643	230	2.8	32.5	936	11
K 3-3-2f	27,509	9,068	234	2.9	33.0	1,567	30

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K 3-3-2g	40,800	13,973	213	2.6	34.2	2,109	31
K 3-3-2h	31,304	10,449	187	2.3	33.4	1,624	20
K 3-3-3a	33,665	11,317	213	2.6	33.6	1,128	98
K 3-3-3b	41,193	14,121	243	3.0	34.3	1,804	45
K 3-4-1	30,926	10,311	207	2.6	33.3	1,219	67
K 3-4-2	38,937	13,275	212	2.6	34.1	1,010	52
K 3-4-3	16,084	5,033	194	2.4	31.3	705	39
K 3-5	21,773	7,016	186	2.3	32.2	257	20
K 3-6	40,880	14,003	223	2.8	34.3	545	24
K4 (Main River ; Ab. Vanak)							
K4-1-1	39,125	13,345	213	2.6	34.1	1,363	55
K4-1-2	36,974	12,542	189	2.3	33.9	12,394	96
K4-1-3	36,344	12,308	220	2.7	33.9	8,530	57
K4-1-4	41,879	14,379	230	2.8	34.3	6,691	70
K4-1-5	60,551	21,547	197	2.4	35.6	1,681	39
K4-1-6	60,596	21,564	386	4.8	35.6	2,457	23
K4-1-7	81,324	29,779	576	7.1	36.6	2,660	22
K4-1-7a	163,123	63,904	457	5.6	39.2	3,968	42
K4-1-7b	32,317	10,820	128	1.6	33.5	1,989	21
K4-1-7c	37,946	12,905	122	1.5	34.0	2,865	26
K4-1-7d	34,860	11,758	142	1.7	33.7	2,265	20
K4-1-7e	21,213	6,818	129	1.6	32.1	1,426	13
K4-1-7f	38,493	13,109	133	1.6	34.1	2,703	24
K4-1-7g	28,761	9,521	124	1.5	33.1	2,090	19
K4-1-7h	30,660	10,213	140	1.7	33.3	1,977	18
K4-1-7i	29,661	9,849	138	1.7	33.2	1,939	17
K4-1-7j	38,961	13,284	138	1.7	34.1	2,102	35
K4-1-7k	22,008	7,099	135	1.7	32.3	1,126	19
K4-1-7l	28,080	9,274	116	1.4	33.0	2,002	18
K4-1-7m	62,546	22,327	139	1.7	35.7	4,367	39
K4-1-7n	69,319	24,993	206	2.5	36.1	3,153	35
K4-1-8	93,125	34,551	312	3.9	37.1	5,292	48
K4-1-8a	53,274	18,724	201	2.5	35.1	3,915	34
K4-1-8b	40,141	13,726	195	2.4	34.2	3,511	31
K4-1-9	39,731	13,572	203	2.5	34.2	3,203	29
K4-1-10	38,005	12,927	132	1.6	34.0	4,514	43
K4-1-11	69,406	25,027	175	2.2	36.1	6,849	260
K4-1-12	33,451	11,238	162	2.0	33.6	3,321	30
K4-1-13	58,352	20,690	199	2.4	35.5	5,401	95
K4-1-14	57,064	20,190	198	2.4	35.4	5,736	143
K4-1-15	26,426	8,677	220	2.7	32.8	2,227	56
K4-2-1	37,072	12,579	190	2.3	33.9	3,672	25
K4-3-1	62,930	22,477	310	3.8	35.7	3,808	32
K4-3-2	113,588	42,963	598	7.4	37.8	3,713	31
K4-4-1	30,715	10,234	211	2.6	33.3	872	23
K4-4-1a	28,538	9,441	183	2.3	33.1	851	39
K4-4-1b	15,871	4,960	122	1.5	31.3	191	14
K4-4-2a	17,807	5,627	135	1.7	31.6	170	14
K4-4-2b	39,721	13,568	143	1.8	34.2	1,011	29
K4-4-3	26,403	8,669	128	1.6	32.8	277	23
K5 (Main River ; Bazoft)							
K5-1	18,390	5,830	161	2.0	31.7	48	20
K5-2	28,453	9,410	168	2.1	33.1	112	36
K5-3	23,978	7,799	165	2.0	32.5	48	27
K5-4	37,805	12,852	183	2.3	34.0	96	40
K5-5	39,643	13,539	190	2.3	34.2	353	72
K5-6	35,815	12,112	188	2.3	33.8	176	35
K5-7	17,211	5,421	175	2.2	31.5	417	23
K5-8	11,795	3,581	170	2.1	30.4	305	12
K5-9	9,915	2,960	166	2.1	29.9	160	7
K5-10	43,688	15,062	237	2.9	34.5	609	31
K5-11	29,187	9,676	185	2.3	33.2	433	20
K5-12	45,801	15,863	252	3.1	34.6	305	24

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K5-13-1a	18,540	5,882	182	2.2	31.7	273	12
K5-13-1b	43,087	14,834	285	3.5	34.4	673	20
K5-13-2	19,718	6,293	178	2.2	31.9	305	13
K5-14	23,657	7,685	244	3.0	32.5	305	12
K5-15	35,192	11,881	280	3.5	33.8	898	16
K5-16	48,953	17,064	319	3.9	34.9	994	20
K5-17	72,043	26,072	282	3.5	36.2	2,052	35
K5-18	19,668	6,276	285	3.5	31.9	497	8
K5-19	47,927	16,672	315	3.9	34.8	1,170	20
K5-19a	70,613	25,505	339	4.2	36.1	513	16
K5-20	53,494	18,808	262	3.2	35.2	1,283	21
K5-21	32,215	10,783	249	3.1	33.5	224	7
K5-22	88,334	32,606	529	6.5	36.9	321	10
K5-23	68,024	24,481	354	4.4	36.0	353	11
K5-24	68,135	24,525	525	6.5	36.0	224	8
K5-25	84,708	31,141	538	6.6	36.8	305	9
K5-26	122,420	46,641	509	6.3	38.1	513	15
K5-27	101,255	37,874	546	6.7	37.4	353	11
K5-28	49,821	17,396	515	6.3	34.9	176	5
K5-29-1	49,969	17,453	515	6.3	34.9	176	5
K5-29-2	92,272	34,204	546	6.7	37.1	321	10
K5-29-3	42,451	14,595	507	6.2	34.4	144	5
K5-29-4	99,495	37,152	550	6.8	37.3	353	11
K5-30	121,015	46,055	561	6.9	38.1	689	24
K5-31-1	42,746	14,706	507	6.3	34.4	144	5
K5-31-2	51,000	17,849	516	6.4	35.0	176	6
K5-32-1	84,608	31,100	542	6.7	36.8	305	9
K5-32-2	100,379	37,515	551	6.8	37.4	353	11
K5-33	120,131	45,686	561	6.9	38.0	289	31
K6 (Main River : Lordegan)							
K6-1-1	40,020	13,680	205	2.5	34.2	529	58
K6-1-2	40,998	14,047	197	2.4	34.3	561	62
K6-1-3	41,273	14,151	190	2.3	34.3	1,716	107
K6-1-4	28,551	9,445	172	2.1	33.1	2,441	150
K6-1-5	32,719	10,968	175	2.2	33.5	3,190	191
K6-1-6	34,425	11,597	204	2.5	33.7	5,035	106
K6-1-7	60,668	21,593	206	2.5	35.6	12,117	225
K6-1-8	58,109	20,595	197	2.4	35.4	12,462	165
K6-1-9	34,870	11,762	220	2.7	33.7	6,356	84
K6-1-10	47,595	16,546	210	2.6	34.8	8,210	122
K6-2	34,913	11,777	177	2.2	33.7	1,956	112
K6-3-1	39,550	13,504	193	2.4	34.1	926	105
K6-3-2	34,574	11,652	199	2.4	33.7	206	62
K6-4-1	75,806	27,570	211	2.6	36.4	6,028	1,095
K6-4-2	42,812	14,731	212	2.6	34.4	3,610	107
K6-4-3	48,843	17,022	217	2.7	34.9	4,038	108
K6-4-4	41,702	14,312	199	2.5	34.3	3,819	97
K6-4-5	43,060	14,824	187	2.3	34.4	6,384	113
K6-5-1	41,275	14,152	218	2.7	34.3	2,908	76
K6-6-1	32,755	10,981	197	2.4	33.5	10,737	87
K7 (Main River : Khersan)							
K7-0-1	14,526	4,501	167	2.1	31.0	3,672	0
K7-0-2	16,092	5,036	169	2.1	31.3	3,808	32
K7-0-3	62,316	22,237	193	2.4	35.7	3,713	43
K7-0-4	28,836	9,549	179	2.2	33.1	872	167
K7-0-5	18,468	5,857	171	2.1	31.7	851	86
K7-0-5-1a	29,646	9,843	179	2.2	33.2	191	56
K7-0-5-1b	24,462	7,972	176	2.2	32.6	170	118
K7-0-5-2	37,800	12,850	184	2.3	34.0	1,011	64
K7-0-5-3	44,442	15,347	186	2.3	34.5	277	205
K7-0-5-4	19,440	6,196	172	2.1	31.9	48	242
K7-0-5-5	55,506	19,586	225	2.8	35.3	112	102
K7-0-6	31,441	10,499	178	2.2	33.4	48	204

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K7-0-6a	18,083	5,723	169	2.1	31.6	96	40
K7-0-7	21,363	6,871	154	1.9	32.2	353	19
K7-0-8	24,801	8,093	118	1.5	32.6	176	29
K7-0-9	19,652	6,270	92	1.1	31.9	417	32
K7-0-10-1	5,062	1,416	99	1.2	28.0	305	6
K7-0-10-2	23,122	7,494	114	1.4	32.4	160	27
K7-0-10-3a	22,925	7,424	160	2.0	32.4	609	20
K7-0-10-3b	26,406	8,670	177	2.2	32.8	433	38
K7-0-10-4	20,220	6,469	119	1.5	32.0	305	22
K7-0-10-5a	26,853	8,831	131	1.6	32.9	273	16
K7-0-10-5b	41,115	14,091	165	2.0	34.3	673	30
K7-0-10-6a	17,112	5,387	109	1.3	31.5	305	8
K7-0-10-6b	20,832	6,684	108	1.3	32.1	305	10
K7-0-10-6c	20,876	6,700	109	1.3	32.1	898	10
K7-0-10-6d	21,382	6,878	114	1.4	32.2	994	10
K7-0-10-6e	18,857	5,992	123	1.5	31.8	2,052	8
K7-0-10-6f	11,318	3,423	104	1.3	30.2	497	8
K7-0-10-6g	31,476	10,512	115	1.4	33.4	1,170	16
K7-0-10-6h	31,009	10,341	111	1.4	33.3	513	15
K7-0-10-6i	10,263	3,074	99	1.2	30.0	1,283	5
K7-0-10-6j	17,017	5,354	103	1.3	31.5	224	8
K7-0-10-6k	22,201	7,167	105	1.3	32.3	321	11
K7-0-10-6l	21,972	7,087	105	1.3	32.3	353	11
K7-0-10-6m	8,476	2,492	96	1.2	29.4	224	4
K7-0-10-6n	22,716	7,350	121	1.5	32.4	305	0
K7-0-10-6o	12,654	3,868	116	1.4	30.6	513	10
K7-0-10-6p	18,354	5,817	103	1.3	31.7	353	10
K7-0-10-6q	24,609	8,025	109	1.3	32.6	176	12
K7-0-10-6r	25,130	8,211	117	1.4	32.7	176	42
K7-0-10-6s	26,699	8,775	107	1.3	32.9	321	58
K7-0-10-6t	20,082	6,420	104	1.3	32.0	144	10
K7-0-10-7	40,856	13,994	133	1.6	34.3	353	20
K7-0-10-8	36,989	12,548	127	1.6	33.9	689	16
K7-0-10-9	48,267	16,802	135	1.7	34.8	144	30
K7-0-11	9,346	2,774	105	1.3	29.7	176	12
K7-0-12	14,054	4,340	109	1.3	30.9	305	21
K7-0-13-1	20,463	6,554	112	1.4	32.0	353	22
K7-0-13-2	16,815	5,284	111	1.4	31.4	289	25
K7-0-14-1	18,050	5,712	114	1.4	31.6	529	26
K7-0-14-2	10,343	3,101	106	1.3	30.0	561	14
K7-0-14-3	24,706	8,060	116	1.4	32.6	1,716	36
K7-0-14-4	82,904	30,414	150	1.9	36.7	2,441	38
K7-0-14-5	81,890	30,006	186	2.3	36.6	3,190	73
K7-0-15	9,622	2,864	84	1.0	29.8	5,035	18
K7-0-16	18,352	5,816	78	1.0	31.7	12,117	41
K7-0-17	19,432	6,193	89	1.1	31.9	12,462	35
K7-0-18	41,309	14,164	190	2.3	34.3	6,356	32
K7-0-19-1	47,641	16,563	262	3.2	34.8	8,210	27
K7-0-19-2	25,549	8,361	163	2.0	32.7	1,956	23
K7-0-20a	63,336	22,636	311	3.8	35.7	926	31
K7-0-20b	51,733	18,130	318	3.9	35.0	206	39
K7-0-21	65,225	23,378	200	2.5	35.8	6,028	51
K7-0-22	45,684	15,818	293	3.6	34.6	3,610	22
K7-0-23	28,118	9,288	190	2.3	33.0	4,038	22
K7-0-24	42,543	14,629	180	2.2	34.4	3,819	37
K7-1	43,534	15,004	222	2.7	34.5	643	62
K7-2	45,209	15,638	223	2.7	34.6	158	62
K7-3	20,866	6,696	207	2.5	32.1	137	60
K7-4	32,283	10,808	214	2.6	33.5	232	26
K7-5-1	41,097	14,085	212	2.6	34.3	1,485	45
K7-5-2	35,356	11,941	218	2.7	33.8	885	30
K7-5-3	34,840	11,751	217	2.7	33.7	969	29
K7-5-4	38,238	13,013	196	2.4	34.0	1,485	18

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K7-5-5	33,756	11,350	195	2.4	33.6	1,633	28
K7-5-6	17,574	5,547	183	2.3	31.6	1,445	29
K7-6-1	31,189	10,407	185	2.3	33.4	643	25
K7-6-2	43,567	15,016	198	2.4	34.5	8,028	38
K7-7	18,868	5,996	169	2.1	31.8	337	139
K7-8	23,078	7,479	195	2.4	32.4	316	25
K7-9	32,563	10,911	175	2.2	33.5	1,528	46
K7-10	20,547	6,584	175	2.2	32.0	369	129
K7-11	36,750	12,459	193	2.4	33.9	295	27
K7-12-1	17,806	5,627	183	2.3	31.6	727	55
K7-12-2	32,359	10,836	186	2.3	33.5	1,327	27
K7-12-3	12,854	3,936	177	2.2	30.6	1,517	49
K7-13	19,198	6,111	185	2.3	31.8	316	31
K7-14	35,554	12,015	196	2.4	33.8	105	23
K7-15	21,600	6,955	185	2.3	32.2	316	57
K7-16	29,702	9,864	181	2.2	33.2	516	28
K7-17	45,973	15,928	201	2.5	34.6	200	41
K7-18	39,690	13,557	184	2.3	34.2	221	74
K7-19	14,310	4,427	167	2.1	30.9	316	74
K7-20	26,838	8,825	178	2.2	32.9	558	24
K7-21	22,680	7,337	175	2.2	32.4	622	67
K7-22	23,112	7,491	175	2.2	32.4	569	50
K7-23	16,104	5,040	165	2.0	31.3	464	51
K7-24-1	26,832	8,823	171	2.1	32.9	4,035	36
K7-24-2	20,034	6,404	173	2.1	32.0	2,876	69
K7-24-3	14,124	4,364	163	2.0	30.9	2,012	50
K7-24-4	14,310	4,427	167	2.1	30.9	2,139	36
K7-25	35,857	12,127	180	2.2	33.8	906	37
K7-26	18,524	5,876	164	2.0	31.7	2,033	80
K7-27	11,897	3,615	157	1.9	30.4	1,823	46
K7-28	37,698	12,812	175	2.2	34.0	5,805	31
K7-29	29,052	9,627	159	2.0	33.1	4,667	99
K7-30	25,184	8,230	168	2.1	32.7	3,919	80
K7-31	29,025	9,617	169	2.1	33.1	4,435	67
K7-32-1	42,693	14,686	184	2.3	34.4	4,825	78
K7-32-2	12,796	3,916	143	1.8	30.6	2,170	136
K7-33	16,210	5,076	151	1.9	31.3	1,896	6
K7-34-1	28,224	9,327	167	2.1	33.0	6,363	81
K7-34-2	13,957	4,307	159	2.0	30.9	3,192	110
K7-35-1	46,035	15,952	191	2.3	34.7	3,297	55
K7-35-2	35,520	12,002	178	2.2	33.8	8,923	95
K7-35-3	24,950	8,147	240	3.0	32.7	1,338	147
K7-36-1	34,917	11,779	191	2.4	33.7	3,677	33
K7-36-2	27,073	8,910	210	2.6	32.9	1,777	93
K7-36-3	21,516	6,925	232	2.9	32.2	1,237	43
K7-36-3a	42,557	14,634	253	3.1	34.4	3,497	31
K7-36-3b	26,632	8,751	257	3.2	32.9	2,227	86
K7-36-3c	36,038	12,194	285	3.5	33.8	2,811	77
K7-36-4	44,584	15,401	220	2.7	34.5	4,509	122
K7-36-5	44,109	15,221	292	3.6	34.5	4,712	268
K7-37-1	14,714	4,564	179	2.2	31.0	1,001	544
K7-37-2	20,591	6,599	196	2.4	32.0	1,327	29
K7-37-3	24,270	7,903	263	3.2	32.6	1,212	39
K7-37-4a	40,030	13,684	273	3.4	34.2	2,096	33
K7-37-4b	37,449	12,719	253	3.1	34.0	2,423	53
K7-37-5a	17,394	5,484	255	3.1	31.5	791	49
K7-37-5b	32,365	10,838	279	3.4	33.5	1,767	24
K7-37-5c	32,276	10,805	259	3.2	33.5	1,825	36
K7-37-5d	62,241	22,208	346	4.3	35.7	2,899	41
K7-37-5e	46,802	16,244	337	4.2	34.7	2,206	61
K7-37-5f	63,115	22,550	347	4.3	35.7	4,037	38
K7-37-5g	24,761	8,079	317	3.9	32.6	1,132	278
K7-37-6a	18,769	5,962	257	3.2	31.8	1,045	25

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K7-37-6b	36,324	12,301	274	3.4	33.9	2,187	20
K7-37-6c	40,769	13,962	308	3.8	34.2	2,284	31
K7-37-6d	38,757	13,208	296	3.7	34.1	2,245	31
K7-37-7a	38,266	13,024	275	3.4	34.0	2,216	31
K7-37-7b	27,656	9,121	263	3.2	33.0	2,441	38
K7-38	52,902	18,580	267	3.3	35.1	5,859	32
K7-39-1	34,799	11,735	288	3.6	33.7	1,743	567
K7-39-2	69,797	25,182	320	4.0	36.1	3,790	173
K7-40	28,092	9,279	236	2.9	33.0	1,642	317
K7-41-1	43,026	14,812	290	3.6	34.4	2,204	40
K7-41-2	59,162	21,005	316	3.9	35.5	2,766	51
K7-41-3	45,928	15,911	336	4.1	34.6	1,990	68
K7-42-1	60,755	21,627	307	3.8	35.6	4,847	48
K7-42-2	26,211	8,599	279	3.4	32.8	1,102	439
K7-43	30,267	10,070	294	3.6	33.3	2,834	61
K7-44	56,608	20,013	311	3.8	35.4	3,857	265
K7-45	39,517	13,492	318	3.9	34.1	1,765	257
K7-46	40,765	13,960	289	3.6	34.2	1,934	44
K7-47	39,668	13,548	288	3.6	34.2	1,822	48
K7-48	55,198	19,466	298	3.7	35.3	2,002	45
K7-49	58,331	20,682	323	4.0	35.5	2,676	49
K7-50	58,996	20,940	300	3.7	35.5	1,631	65
K7-51-1	55,529	19,595	307	3.8	35.3	0	40
K7-51-2	44,390	15,328	299	3.7	34.5	1,327	0
K7-52	47,180	16,387	293	3.6	34.7	61,353	33
K7-53	23,885	7,766	274	3.4	32.5	0	175
K8 (Main River : Karoon)							
K8-1	35,030	11,821	195	2.4	33.7	983	90
K8-2	36,188	12,250	196	2.4	33.9	1,609	63
K8-3-1	26,853	8,831	189	2.3	32.9	715	28
K8-3-2	18,354	5,817	169	2.1	31.7	547	20
K8-3-3	30,658	10,213	172	2.1	33.3	916	42
K8-4	68,794	24,785	213	2.6	36.0	1,687	185
K8-5	56,086	19,810	205	2.5	35.3	1,620	64
K8-6-1a	17,723	5,598	268	3.3	31.6	458	17
K8-6-1b	71,569	25,884	396	4.9	36.2	827	41
K8-6-1c	62,263	22,216	523	6.4	35.7	123	20
K8-6-1d	57,049	20,184	244	3.0	35.4	402	40
K8-6-1e	69,985	25,256	288	3.6	36.1	480	43
K8-6-2a	91,535	33,905	546	6.7	37.0	860	40
K8-6-2b	101,264	37,877	551	6.8	37.4	134	25
K8-6-2c	34,344	11,567	496	6.1	33.7	246	12
K8-6-2d	31,101	10,375	492	6.1	33.4	168	24
K8-6-2e	40,093	13,708	504	6.2	34.2	324	16
K8-6-3a	74,142	26,907	535	6.6	36.3	592	29
K8-6-3b	107,897	40,608	555	6.8	37.6	827	42
K8-6-3c	56,159	19,839	521	6.4	35.3	447	22
K8-6-4	92,420	34,264	546	6.7	37.1	145	30
K8-6-5	22,509	7,276	176	2.2	32.3	614	22
K8-6-6	111,522	42,107	504	6.2	37.8	145	39
K8-6-7	41,802	14,350	187	2.3	34.3	45	9
K8-7-1a	102,599	38,426	540	6.7	37.5	1,017	74
K8-7-1b	19,419	6,189	292	3.6	31.9	246	17
K8-7-1c	35,174	11,874	309	3.8	33.8	34	13
K8-7-2	62,774	22,416	402	5.0	35.7	112	22
K8-8	35,731	12,080	404	5.0	33.8	559	41
K8-9	37,853	12,870	313	3.9	34.0	659	54
K8-10	48,048	16,718	299	3.7	34.8	972	68
K8-11	68,975	24,857	330	4.1	36.0	1,341	85
K8-12	50,795	17,770	235	2.9	35.0	3,448	85
K8-13a	25,240	8,251	255	3.1	32.7	1,498	35
K8-13b	43,968	15,168	316	3.9	34.5	2,204	51
K8-14	22,330	7,213	206	2.5	32.3	1,470	36

Sub-basin No.	Annual Rainfall (1000m3)	Annual Runoff (1000m3)	Annual Runoff Depth (mm/year)	Mean Maximum Runoff (mm/day)	Annual Runoff Ratio (%)	Water Use for Irrigation (1000m3)	Water Use for Domestic Water (1000m3)
K8-15-1	40,029	13,684	313	3.9	34.2	1,187	33
K8-15-2	37,098	12,589	311	3.8	33.9	141	15
K8-16	28,025	9,254	196	2.4	33.0	933	38
K8-17	43,996	15,178	314	3.9	34.5	763	29
K8-18-1	78,629	28,698	332	4.1	36.5	170	30
K8-18-2	69,448	25,044	328	4.0	36.1	339	26
K8-18-3	26,488	8,699	268	3.3	32.8	57	11
K8-19a	46,784	16,237	254	3.1	34.7	735	27
K8-19b	31,810	10,634	251	3.1	33.4	1,130	22
K8-19c	15,130	4,706	220	2.7	31.1	226	14
K8-20	35,435	11,971	259	3.2	33.8	1,244	24
K8-21	56,330	19,905	249	3.1	35.3	1,300	50
K8-22	14,977	4,654	241	3.0	31.1	509	10
K8-23	51,538	18,055	247	3.0	35.0	1,978	37
K8-24	50,518	17,663	271	3.3	35.0	994	37
K8-25-1a	26,196	8,594	232	2.9	32.8	529	26
K8-25-1b	41,935	14,400	195	2.4	34.3	641	110
K8-25-2	23,762	7,722	200	2.5	32.5	497	37
K8-26	41,759	14,334	233	2.9	34.3	1,844	68
K8-27	53,948	18,983	257	3.2	35.2	1,363	6
K8-28	36,628	12,414	195	2.4	33.9	4,056	76
K8-29	49,742	17,366	232	2.9	34.9	4,874	89
K8-30	51,520	18,048	226	2.8	35.0	5,211	95

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K 1 (Main river ; Ab. Behesht Abad)						
K 1-1	Beheshet abad	Ab. Beshet Abad	Flood			
K 1-1-2	Asad abad	Ab. Jounghan				
K 1-1-3	Chelicheh, Chegha hest	Ab. Jounghan	Flood			
K 1-1-4	Gusheh, Deh cheshmeh, Gajoun	Ab. Jounghan	Flood			
K 1-1-5	Farsan, Babahydar	Ab. Jounghan / Ru. Sarab	Flood			
K 1-1-6	Harigan, etc	Ab. Jounghan / Ru. Sarab				
K 1-1-7	Isa abad, Fill abad	Ab. Jounghan / Ru. Sarab	Flood			
K 1-1-8	Omid abad	Ab. Jounghan / Ru. Sarab				
K 1-2-1	Salm, Balagholi	R. Kiyar				
K 1-2-2	Agha Rahim	R. Kiyar				
K 1-2-3a	Dastna	Ab. Shelamzar				
K 1-2-3b	Shelamzar, Jafar abad	Ab. Shelamzar	Flood			
K 1-2-3c	Gahru, Haji abad, Zardkan balla & paien, Avarkan	Ab. Shelamzar				
K 1-2-3d	Ghaleh mameka, Mazreah bid	Ab. Shelamzar				
K 1-2-4a	Tashniz	R. Kiyar				
K 1-2-4b	Kharaji, Qalehtak, Amir abad	R. Kiyar				
K 1-2-5a	Sar teshnize, Dezak, Musa abad	R. Kiyar				
K 1-2-5b	Dastgerd, Geshnize gaan, Ghaleh salim	R. Kiyar				
K 1-2-5c	Surag	R. Kiyar				
K 1-2-5d	Irancheh	R. Kiyar				
K 1-2-5e	-	R. Kiyar				
K 1-2-5f	Deh no	R. Kiyar				
K 1-2-5g	-	R. Kiyar	Flood			
K 1-2-5h	Faradonbeh	R. Kiyar				
K 1-2-5i	-	R. Kiyar				
K 1-2-5j	Borujen, Atagaleh	R. Kiyar	Flood			
K 1-2-5k	Borujen, Naghaneh	R. Kiyar	Flood			
K 1-2-5l	Borujen, Faradonbeh	R. Kiyar				
K 1-2-5m	Borujen	R. Kiyar	Flood			
K 1-2-5n	Borujen	R. Kiyar				
K 1-2-5o	Amamzadeh	R. Kiyar				
K 1-2-5p	Deh sheykh	R. Kiyar				
K 1-2-5q	Sefiddasht	R. Kiyar				
K 1-2-5r	-	R. Kiyar				
K 1-2-5s	Abass abad	R. Kiyar				
K 1-2-5t	Sefiddasht, Zardia	R. Kiyar				
K 1-2-5u	Kheir abad	R. Kiyar				
K 1-2-6a	Shamsh abad	Ab. Jahanbin	Flood	96-8/31		
K 1-2-6b	-	Ab. Jahanbin	Flood	96-8/31		
K 1-2-6c	Taghanak, Bahram abad	Ab. Jahanbin	Flood	96-8/31		
K 1-2-6d	Farrokhshahr, Mazraeh digak miani	Ab. Jahanbin	F/D.Flow			
K 1-2-6e	Taher rabat	Ab. Jahanbin				
K 1-2-6f	-	Ab. Jahanbin	Flood			
K 1-2-6g	Farrokhshahr	Ab. Jahanbin				
K 1-2-6h	Rameh mansuri	Ab. Jahanbin				
K 1-2-6i	Shahre kord, Eshgaftak	Ab. Jahanbin	Flood			
K 1-2-6j	Nofech, Vardangan, Dareh ghashlagh	Ab. Jahanbin				
K 1-2-6k	-	Ab. Jahanbin				
K 1-2-6l	No abad, Cheshmeh zan	Ab. Jahanbin				
K 1-2-6m	Hafshejan, Sirak	Ab. Jahanbin	Flood			

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K 1-2-6n	-	Ab. Jahanbin				
K 1-2-6o	Chaleshtar, Pir-baloot, Arjang, Soltan sabz posh, Emam ghisi	Ab. Jahanbin				
K 1-2-6p	Kakalak	Ab. Jahanbin				
K 1-2-6q	Harchgan, Gerdab	Ab. Jahanbin				
K 1-2-6r	Toomanak	Ab. Jahanbin				
K 1-3	Juneqan	Ab. Jounghan	F/D.Flow			
K 1-4-1	Pardenjan, Keren	R. Gorgak	Flood			
K 1-4-2a	Sureshjan, Mostafa abad	R. Gorgak				
K 1-4-2b	Aqbolugh, Fateh abad	R. Gorgak				
K 1-4-2c	Vanan, Khoy, Katek	R. Gorgak				
K 1-4-2d	Harubi, Pir kal	R. Gorgak				
K 1-4-2e	Surshejan	R. Gorgak				
K 1-4-3	Amir abad, Darch abad, Malek abad, Sohrab abad	R. Gorgak				
K 2 (Main river ; Ab. Kurang)						
K2-1	Karim abad	Ab. Kurang	F/D.Flow, O/F, HNR	98-3/29	1	70
	Kaj		F/D.Flow	95-4/24		
			F/D.Flow	96-4/24		
	Kaj (central)		F/D.Flow	97-5/31		
K2-2	Pole ahani	Ab. Kurang				
K2-3	Rostam abad, Dehow nadeh, Shekar abad, Aliku	Ab. Kurang				
K2-4	-	Ab. Kurang				
K2-5-1a	Afsar abad, Dezdak, Godan, Dozdak balla & paien, Sayf abad, Darab, Godar, Bahman abad	Ab. Dez Daran (Du ab)				
K2-5-1b	Dareh dezgah, Dareh razgah, Dareh dozgah	Ab. Dez Daran				
K2-5-2	Gudall	Ab. Dez Daran				
K2-5-3	-	Ab. Dez Daran				
K2-5-4	Doabe samsami, Drab	Ab. Dez Daran				
K2-6	Dashtak	Ab. Kurang				
K2-7	-	Ab. Kurang				
K2-8	-	Ab. Kurang				
K2-9	Parjoft, Gol abad, Ghaleh haji baba, Nasir abad sefidar, Bidgan, Yavar abad, Moor del	Ab. Kurang				
K2-10	Shahriari, Ghaleh bidomi	Ab. Kurang				
K2-10a	Chegaleh, Darshegeft, Mohamad gla, Birgan	Ab. Kurang				
K2-11	Douruzan abad	Ab. Kurang				
K2-12	Kolonchi	Ab. Kurang				
K2-13	Cheshmeh kuhrang	Ab. Kurang				
K2-14	-	Ab. Kurang				
K2-15	-	Ab. Kurang				
K2-16	-	Ab. Kurang				
K 3 (Main river ; Karoon)						
K3-0a	Cheteh, Lirali	Karoon				
K3-0b	Murzam, Deh kohneh	Karoon				
K3-0c	Mashhadi amir, Badamestan, Dareh shuor	Karoon				
K 3-1-1	Dareh shur	Karoon				
K 3-1-2	-	Karoon				
K 3-1-3	Shiasi, Amam zadeh	Karoon				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K 3-1-4	Kinak	Karoon				
K 3-1-5	Armand	Karoon				
K 3-1-6	Farsun, Sim naghaleh, Dasht armand, Joghd	Karoon				
K 3-1-7	Buger	Karoon	D.Flow	95-1/23		
				95-3/5		
K 3-1-8	Sunak, Emam zadeh hydar	Karoon				
K 3-1-9	Darehe yaas, Darehe beed	Karoon	M-Flood, T-D.Flow, O/F	98-3/29	1	80
			Small F.	5ys ago		
	Madan	Karoon	Flood, O/F	98-3/29	1	80
K 3-1-10	Chahar mouran, Dareh esheghe, Sarkon balla & paien	Karoon				
K 3-1-11	Sharak-gadid doorak	Karoon	M-Flood, T-D.Flow, O/F	98-3/30	1	80
K 3-1-12	Puraz, Berenjekoon	Karoon				
K 3-1-13	Gel sefid, Rahim abad, Takhteh chub	Karoon	M-Flood, T-D.Flow	98		
K 3-1-13a	Ab gaiur, Bare mordeh	Karoon /Ab Gaiur				
K 3-1-14a	Kavand	Karoon / Tan Mahmud				
K 3-1-14b	Sartange mahmud, Kavand darvishan	Tan Mahmud / Tan Gandab				
K 3-1-15	Sar mor, Lirab, No turki, Abe sard, Mamasani	Ab. Kali				
K 3-1-16	Aziz abad balla & paien	Ab. Kali	M-Flood, T-D.Flow, O/F, HNR, Intake d.	98-5/13	1	80
			Small F.			
K 3-1-17	Morad abad, Najif abad	Ab. Kali				
K 3-1-18	Chahr mura	Ab. Kali				
K 3-1-19	Lushesh	Ab. Kali				
K 3-2-1	Band var	Ab. Sarkhun				
K 3-2-2	Kanamee	Ab. Sarkhun	D.Flow, O/F	98-3/29	1	70
	Shiassi		D.Flow, O/F	98-3/29	1	70
			Flood	18ys ago		
K 3-2-3	Deh-kohneh, Varzard, Emam zadeh jafar, Deh no	Ab. Sarkhun	M-Flood, T-D.Flow, O/F.	98-3/29	1	70
			Flood	1y ago		
K 3-2-4	Malek shir	Ab. Sarkhun	M-Flood, T-D.Flow, O/F.	98-3/29	1	70
			Small F.	1y ago		
	Chole-dan		M-Flood, T-D.Flow, O/F.	98-3/29	1	70
	Sarqal-eh, Sarma-zdeh		M-Flood, T-D.Flow, O/F.	98-3/29	1	70
	Kaheedan		M-Flood, T-D.Flow, O/F.	98-3/29	1	70

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood
			Cause	Date of occurance	No. of floods	(years ago)
K 3-2-4	Ghaeedan		M-Flood, T-D.Flow, O/F.	98-3/29	1	70
			Flood	18ys ago		
K 3-2-5	Sarkhun	Ab. Sarkhun	D.Flow	98		
K 3-2-6	Gandomkar	Ab. Sarkhun				
K 3-2-7	-	Ab. Sarkhun				
K 3-3-1	Duporan, Bag-giran, Gajutoot, Rigak	R. Sabezkuh				
K 3-3-2a	Damab, Deh no (pain, bala)	R. Sabezkuh	M-Flood, T-D.Flow	98		
K 3-3-2b	Ralem abad, Parkhor, Zolm abad, Joghdan	R. Sabezkuh				
K 3-3-2c	-	R. Sabezkuh				
K 3-3-2d	Anjir	R. Sabezkuh				
K 3-3-2e	Naghan, Marik, Kerdan	R. Sabezkuh				
K 3-3-2f	Jahmon, Karch bala, Jeghdan	R. Sabezkuh				
K 3-3-2g	Jehraz, Gashed, Parkhur, Chahartaq	R. Sabezkuh				
K 3-3-2h	Jerzgoon	R. Sabezkuh				
K 3-3-3a	Ardal	R. Sabezkuh				
K 3-3-3b	Cheshmeh sulegan	R. Sabezkuh				
K 3-4-1	Chelo, Deh Kohneh, Haftpiran	Karoon	Flood	98		
K 3-4-2	Davazdah emam, Sar char	Karoon	F/D.Flow	98		
K 3-4-3	-	Karoon				
K 3-5	Nou-tarake	Ab. Kari	F/D.Flow, O/F	98-3/29	1	70
			Small F.	1y ago		
K 3-6	Gerdepineh, Abass abad, Cheshmeh soliman, Rupineh	Ab. Kari	F/D.Flow, O/F	98-3/29	1	70
			Small F.			
K 4 (Main river : Ab. Vanak)						
K4-1-1	-	Ab. Vanak				
K4-1-2	-	Ab. Vanak				
K4-1-3	Sar pir (Relocation to Borujen)	Ab. Vanak				
K4-1-4	Shams abad	Ab. Vanak	Flood	98		
K4-1-5	Vanak	Ab. Vanak				
K4-1-6	Cheshime ali	R. Sulegan	M-Flood, T-D.Flow			
K4-1-7	Lah-daraze, Tagargab, Godarkabk	R. Sulegan	F/D.Flow			
K4-1-7a	Sulegan, Gharch aaghj	R. Sulegan				
K4-1-7b	Kezan (bala & pain), Dizjan	R. Sulegan				
K4-1-7c	Hossein abad-dardashe, Sekaz, Deh nesa, Narmeh	R. Sulegan				
K4-1-7d	Asi abad, Mehrgerd	R. Berenji - R. Sulegan				
K4-1-7e	-	R. Berenji - R. Sulegan				
K4-1-7f	Haji abad, Sharif abad, Godar	R. Berenji - R. Sulegan				
K4-1-7g	Siyah galak, Dekard, Heydar abad	R. Sulegan				
K4-1-7h	Marouk, Seadat abad, Mehdi abad	R. Sulegan				
K4-1-7i	Dari daraz boulat gharin, Doulat gharm	R. Sulegan				
K4-1-7j	Shur jeh, Ghapaghalu	R. Sulegan				
K4-1-7k	Hossein abad	R. Sulegan				
K4-1-7l	Cheshme sard	R. Sulegan				
K4-1-7m	Tang aahan, Garm abad	R. Garmab - R. Sulegan				
K4-1-7n	Duba arab	Che. Ghanbar - R. Sulegan				
K4-1-8	Moorchegan, Bijgerd, Godarkabk	R. Aghabolugh	F/D.Flow	98		
K4-1-8a	Emamoeys, Hyder abad	R. Aghabolugh	Flood			
K4-1-8b	Kardshahi, Godarkabk	R. Aghabolugh				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous
			Cause	Date of occurance	No. of floods	big flood (years ago)
K4-1-9	Vastegan Nasir abad	R. Aghabolugh	D.Flow D.Flow	98		
K4-1-10	Gandoman	R. Aghabolugh				
K4-1-11	Gandoman, Hosein-abad, Kotak Chermineh, Senajan Maamureh, etc	R. Aghabolugh	F/D.Flow F/D.Flow F/D.Flow			
K4-1-12	Boldaji	R. Aghabolugh	F/D.Flow			
K4-1-13	Kalbibak	R. Aghabolugh				
K4-1-14	Seif abad, Khani abad, Saki abad, Sang chin, Avargan, Ahmad abad, Khedar abad, Avargan, Seyed ali, Sibak, Dastgerd, Metoei	R. Aghabolugh				
K4-1-15	Gelugerd, Ali abad, Sultan abad	R. Aghabolugh				
K4-2-1	-	R. Sulegan				
K4-3-1	Durahan, Gerdebisheh, Deh khoda	R. Gerdbisheh				
K4-3-2	Deh tout, Cheshmeh abdal, Deh bagh, Godar goosh angulki	R. Gerdbisheh				
K4-4-1	Tang golgan	Ab. Jaghjagh				
K4-4-1a	Tang sirveh	Ab. Jaghjagh				
K4-4-1b	Chal ghafa, Tang jalehghafa	Ab. Jaghjagh				
K4-4-2a	-	Ab. Jaghjagh				
K4-4-2b	Ghalaeh gohadam	Ab. Jaghjagh				
K4-4-3	Kanurcheh	Ab. Jaghjagh				
K 5 (Main river ; Bazoft)						
K5-1	Teriz, Barge anjir, Kabuci, Jaroye balla & paien, Kabotarankerm tabe balla & paien	Ab. Bazoft				
K5-2	Talafgir, Asujar, Balutak, Morghak, Barshalan dan, Karestan	Ab. Bazoft				
K5-3	Shalil (bala, paien),	Tri. of Bazoft				
K5-4	Dourak khanbari, Deh kal	Ab. Bazoft				
K5-5	Mur varid	Ab. Bazoft				
K5-6	Sarnaz	Ab. Bazoft				
K5-7	Landeh	Ab. Bazoft				
K5-8	Sanara	Ab. Bazoft				
K5-9	-	Ab. Bazoft				
K5-10	Kahjenvar, Chidak	Tri. of Bazoft				
K5-11	Deh deli	Ab. Bazoft				
K5-12	Ghateh galehmu, Hofel	Ab. Bazoft				
K5-13-1a	-	Tri. of Bazoft				
K5-13-1b	-	Tri. of Bazoft				
K5-13-2	-	Tri. of Bazoft				
K5-14	Demai	Ab. Bazoft				
K5-15	-	Ab. Bazoft				
K5-16	-	Tri. of Bazoft				
K5-17	Muvz	Ab. Bazoft				
K5-18	-	Ab. Bazoft				
K5-19	Talkheh dan, Dorak, Bazgeron	Tri. of Bazoft				
K5-19a	Chaman goly, Tabarak, Cham ghaleh balla paien, Ghaleh kharabeh	Ab. Bazoft				
K5-20	Nazi, Mahmod sham, Sange namak, Damshat, Mian dadan	Tri. of Bazoft	F/D.Flow, O/F	97-9/19	1	100
	Mahmood-abad		F/D.Flow, Sedi.	97-9/19	1	60

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K5-20	Damshat		F/D.Flow, O/F	97-9/19	1	60
	Miyan dohan olia		F/D.Flow, O/F, HNR, Sedi.	97-9/19	1	100
K5-21	Hosain abad	Ab. Bazoft	F/D.Flow,	97-9/19	1	60
	Telord		F/D.Flow,	97-9/19	1	60
	Tarom		F/D.Flow,	97-9/19	1	60
	Roobat-kooh		F/D.Flow,	97-9/19	1	50
K5-22	Chenar	Tri. of Bazoft				
K5-23	Alagi olia Dorak sofla	Ab. Bazoft	F/D.Flow	98-5/13		
K5-24	-	Ab. Bazoft				
K5-25	Houshout, Tik, Kesriz	Ab. Bazoft				
K5-26	Torki	Ab. Teraki (Tri. of Bazoft)				
K5-27	Tashnavi	Tri. of Bazoft				
K5-28	-	Ab. Bazoft				
K5-29-1	-	Tri. of Bazoft				
K5-29-2	-	Ab. Sharmak (Tri. of				
K5-29-3	-	Tri. of Bazoft				
K5-29-4	-	Tri. of Bazoft				
K5-30	Gharehgar, Jamas, Dora, Pozeh bayar, Jagheh sour	Ab. Bazoft				
K5-31-1	-	Tri. of Bazoft				
K5-31-2	-	Tri. of Bazoft				
K5-32-1	Siroun	Ab. Bazoft				
K5-32-2	-	Ab. Bazoft				
K5-33	-	Ab. Bazoft				
K 6 (Main river ; Lordegan)						
K6-1-1	Keroun, Bideleh	R. Monj				
K6-1-2	Ab bidak, Meshk douzm, Monj, Charoub	R. Monj				
K6-1-3	Chiga, Pol borideh baiia & paien	R. Lordegan				
K6-1-4	Karef balla & paien, Khalil abad, Deh chenar, Kolgah milas, Goraz abad, Gosheh	R. Lordegan				
K6-1-5	Kal gachi, Naghan, Kardan, Dar joneh, Naghan balla & paien, Ghaleh cheh	R. Lordegan				
K6-1-6	Shirani, Toutang, Tang kalureh, Jan nesa, Darakeh, Zarin derakht, Totang	R. Lordegan	Flood			
K6-1-7	Dehnu bordbar, Sini, Barjoui	R. Lordegan				
K6-1-8	Alauni, Seif abad, Deh chenar, Doumakan	R. Lordegan				
K6-1-9	Gushki, Feiz abad, Deh ali, Deh rashid	R. Lordegan				
K6-1-10	Deh sahara, Bagh behzad, Sileh	R. Lordegan				
K6-2	Monj	R. Monj	Flood, O/F			
K6-3-1	Milas, Mahour, Kol gah, Chale shirin	R. Lordegan				
K6-3-2	Abza, Sar dashet	R. Lordegan				
K6-4-1	Lordegan, Piran, Tal maroun, Deh no	R. Lordegan	F/D.Flow	95-3/5		
K6-4-2	Kahyan, Chellehgan	R. Lordegan				
K6-4-3	Amiri (pain, bala)	R. Lordegan				
K6-4-4	Gorg ala, Deh no gudarz	R. Lordegan				
K6-4-5	Chanar mahmoodi	R. Lordegan				
K6-5-1	Chah gare	R. Lordegan				
K6-6-1	Bardbar	R. Lordegan				
K 7 (Main river ; Khersan)						
K7-0-1	Murgh shenar	Khersan				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K7-0-2	Deh kahnch, Daren niyek, Narmeh, Gili	Khersan				
K7-0-3	Shahnadjaf, Peruz, Bogh kaj	Tri. of Khersan	F/D.Flow	98-3/29, 5/13	2	40
K7-0-4	Chaleh badoum, Rosta bieg	Khersan				
K7-0-5	Gendab	Tri. of Khersan	F/D.Flow	98-3/29, 5/13	2	70
	Bizhgan		F/D.Flow	98-3/29, 5/13	2	70
	Sefidar		F/D.Flow	98-3/29, 5/13	2	70
	Dam-ab		F/D.Flow	98-3/29, 5/13	2	70
			Small F.	7ys ago		
K7-0-5-1a	Gerdab, Shilaneh	R. Gardab (Tri. of Khersan)				
K7-0-5-1b	-	R. Gardab				
K7-0-5-2	Malkhalifeh, Sadgam, Dasht pagar, Kalvari, Salmani, Tal eshgoftan	R. Gardab				
K7-0-5-3	Abuasagh, Raba ahmadi, Chahr deh, Mishan, Kando, Shahriar	Tri. of R. Gardab				
K7-0-5-4	Sahl abad, Deh sookhteh	R. Pangan (Tri. of R. Gardab)				
K7-0-5-5	Gordab bala, Shirmard	Tri. of R. Gardab				
K7-0-6	Khersan	Khersan				
K7-0-6a	Dashtak balla, Mimand	Tri. of Khersan				
K7-0-7	Chahrah	Khersan				
K7-0-8	Abe malakh, Sivar	Khersan, R. Marbor				
K7-0-9	Mondegan	Tri. of R. Marbor				
K7-0-10-1	Rud abad	Ab. Garmak (Tri. of Khersan)	M-Flood, T-D.Flow	98-3/29		
K7-0-10-2	Tang khasheg	Tange Khoshk (Tri. Of Ab. Garmak)	Flood	98-3/29		
K7-0-10-3a	Sidan, Iran dareh	R. Polar Dareh (Tri. of R. Semirom)				
K7-0-10-3b	-	R. Polar Dareh				
K7-0-10-4	Ala jabayer, Tang ab	R. Semiroum (R. Ghalaeh Sistan)				
K7-0-10-5a	Leh jarui, Bagh maghsud ali	R. Kharkosh (Tri. of R. Semirom)				
K7-0-10-5b	-	R. Kharkosh				
K7-0-10-6a	Zargham abad	R. Hana (Tri. of R. Semirom)				
K7-0-10-6b	-	R. Hana & Trb (R. Jang Abad)				
K7-0-10-6c	Baneh, Cheshmeh azam, Gol aghaji	R. Jang Abad				
K7-0-10-6d	Delma	R. Germuk (Tri. of R. Hana)				
K7-0-10-6e	Garmouk, Naji abad	R. Germuk				
K7-0-10-6f	Sohran	R. Hana & Trb (R. Jang Abad)				
K7-0-10-6g	Chashmeh khuni	R. Hana & Trb				
K7-0-10-6h	Hana, Ghaleh mokhtar khan	R. Hana & Trb, Hana dam				
K7-0-10-6i	-	R. Hana & Trb, Hana dam				
K7-0-10-6j	-	R. Rahimi (Tri. of R. Hana)	Flood	98-3/29		
K7-0-10-6k	Shafi abad	R. Rahimi	Flood	98-3/29		
K7-0-10-6l	Cheshmeh ghajeh, Ghaleh arezomand	Chah Tel (Tri. of Rahimi)				
K7-0-10-6m	Aghbolagh	Sang Sefid (Chah Tel)				
K7-0-10-6n	Jarkan	Sang Sefid (Chah Tel)				
K7-0-10-6k	Shafi abad	R. Rahimi	Flood	98-3/29		
K7-0-10-6l	Cheshmeh ghajeh, Ghaleh arezomand	Chah Tel (Tri. of Rahimi)				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K7-0-10-6m	Aghbolagh	Sang Sefid (Chah Tel)				
K7-0-10-6n	Jarkan	Sang Sefid (Chah Tel)				
K7-0-10-6o	Sartagh	Sang Sefid (Chah Tel)				
K7-0-10-6p	Ghabre kikha, Ghaleh sangi	R. Shesh Boluki (Tri. of R. Hana)				
K7-0-10-6q	-	R. Shesh Boluki				
K7-0-10-6r	Pol gadki, Tange khoshk	R. Shesh Boluki				
K7-0-10-6s	-	R. Shesh Boluki				
K7-0-10-6t	-	Tri. of R. Shesh Boluki				
K7-0-10-7	Ghaleh sistan, Hast	R. Dahan (Tri. of R. Semirom)				
K7-0-10-8	Cheshmeh hasan khani, Zargham abad	R. Dahan				
K7-0-10-9	Samirum, Jozar, Tapeh shahidan	R. Dahan	F/D.Flow			
K7-0-11	-	R. Marbor				
K7-0-12	Nayed ali	R. Marbor				
K7-0-13-1	-	Tri. of R. Marbor				
K7-0-13-2	Khak daneh, Chineh, Mourg	Tri. of R. Marbor				
K7-0-14-1	Deli	Tri. of R. Marbor				
K7-0-14-2	Kameh, Ghaleh iraj, Ghaleh gholamhosien	Tri. of R. Marbor				
K7-0-14-3	Ghareh bor, Dideh jan, Emamzadeh mohamad, Qanat gifteh giveh sin	Tri. of R. Marbor				
K7-0-14-4	Abe pelekan	Tri. of R. Marbor				
K7-0-14-5	Tange jelu	Tri. of R. Marbor				
K7-0-15	Khineh	R. Marbor				
K7-0-16	Khefv, Emamzade seid mahmad	Tri. of R. Marbor				
K7-0-17	-	R. Marbor				
K7-0-18	Bideh, Barand balla & paien	R. Marbor	F/D.Flow	98-3/29		
K7-0-19-1	Gardaneh bizhan, Kal balko, Doregan	R. Marbor	F/D.Flow	98-3/29		
K7-0-19-2	-	Tri. of R. Marbor	D.Flow	98-3/29		
K7-0-20a	Cheshmeh khonyar, Ganjegan, Dorahan, Deh bozurg, Safdar abad, Lurkash, Kahangan	R. Marbor, R. Deli Surkh (Tri. of R. Marbor)	F/D.Flow	98-3/29		
K7-0-20b	Dangzeli, Noghl	R. Deli Surkh	D.Flow	98-3/29		
K7-0-21	Bazargah, Amir abad, Rahiz, Shahid, Kahardan, Valad khani	R. Marbor	F/D.Flow	98-3/29		
K7-0-22	Dareh burgoli, Por rouz	R. Marbor	F/D.Flow	98-3/29		
K7-0-23	Dareh narmak	R. Marbor	F/D.Flow	98-3/29		
K7-0-24	-	R. Kal Sartang (R. Marbor)	F/D.Flow	98-3/29		
K7-1	Deh no, Deh barez, Shevar, Jocall	Khersan	M-Flood, T-D.Flow			
K7-2	Suhrab, Alishir, Chalderaz, Shoar, Mil shoa, Sarchour, Dareh tangi, Mil sha, Shouar	Khersan	M-Flood, T-D.Flow			
K7-3	Lirouk	Khersan				
K7-4	Tark, Chal chenar, Rameh roun	Khersan				
K7-5-1	Tange litoun, Midan, Pagard, Dooragh, Rud rish	Tri. of Khersan				
K7-5-2	Amiri, Deh chall band	Tri. of Khersan				
K7-5-3	Dehe bashiri	Tri. of Khersan				
K7-5-4	Midan, Dorish, Pataveh, Gerdpi, Darboland	Tri. of Khersan				
K7-5-5	Dareh ajam, Dar beri	Tri. of Khersan				
K7-5-6	Tahleh zar, Rameh roon	Tri. of Khersan				
K7-6-1	Silo, Chalgah	Tri. of Khersan				
K7-6-2	-	Tri. of Khersan				
K7-7	Bard pahn, Mohreh gham balla & paien, Lal mineh, Shamlak	Khersan				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K7-8	Ab chenar, Gorab zini, Dareh bandon, Dareh mourd	Khersan				
K7-9	Mel sefid, Shah hosyni, Dareh robah, Sar taveh	Khersan				
K7-10	Poleh, Jalaleh, Mashmi	Tri. of Khersan				
K7-11	Angolak zirna	Khersan				
K7-12-1	Poleh	Tri. of Khersan				
K7-12-2	-	Tri. of Khersan				
K7-12-3	Dareh moorzard	Tri. of Khersan				
K7-13	Ballru, Faryabproyab	Khersan				
K7-14	Labardi, Paryab, Deh zi, Dod rah	Khersan				
K7-15	Paryab, Jalaleh	Khersan				
K7-16	Tange ghebleh	Khersan				
K7-17	-	Tri. of Khersan				
K7-18	Moono, Darkab, Dorj, Dehga, Faj	Khersan				
K7-19	-	Tri. of Khersan				
K7-20	Mareh gaz	Khersan				
K7-21	Dar kalate mahmodi, Monj, Dehe paien, Dashte boz, Bar eshkoft, Emam zadeh mahmood, Dorah	Khersan				
K7-22	Katak, Dareh shour, Grozeh	Khersan				
K7-23	Dingo, Dezak, Poshteh cheh	R. Boshar				
K7-24-1	Tang arj, Shab liz, Baba haji, Benva	R. Shab (Tri. of Boshar)				
K7-24-2	Dareh mishoon	R. Shab				
K7-24-3	-	R. Shab				
K7-24-4	-	R. Shab				
K7-25	Cheshmeh mir hasani, Galkah, Sar soor, Lehsavareh, Bizhgi	R. Boshar				
K7-26	-	R. Boshar				
K7-27	Baraie, Tange ravagh	R. Boshar				
K7-28	Jongah, Chenare baram balla & paien, Tamnak	R. Boshar				
K7-29	Ahmad gharib, Gandizar, Badenko sofla & oliya	R. Boshar				
K7-30	Cheh yel, Gariveh, Sar chal, Gardan talbaladoon, Dora, Chat, Samandi, Ghanat	Tri. of Boshar				
K7-31	Delij balla & paien	R.Boshar				
K7-32-1	Dashtak, Karami	R. Kareh (Tri. of Boshar)				
K7-32-2	-	R. Kareh				
K7-33	Dareh chenari, Deh shikh, Nadeh, Betari, Dareh sar anjiri	R. Boshar				
K7-34-1	Delibechak, Mougar, Tang suran	Kalle Delibechek (Tri. of Boshar)				
K7-34-2	Moujerd	Kalle Delibechek				
K7-35-1	Deh chenar paien & balla, Ali karami	Tri. of Boshar				
K7-35-2	Mian chenar, Sarchenar, Damchenar balla & motevaset	Tri. of Boshar				
K7-35-3	-	Tri. of Boshar				
K7-36-1	Mehriz, Dar shahi, Dareh chili, Bareaftab, Koleh shiran	R. Boshar				
K7-36-2	Rahe mali, Abgarmak, Tolki balla	Tri. of Boshar				
K7-36-3	Kalous balla & paien, Sardasht kalous, Doabe kalous	R. Boshar				
K7-36-3a	Sisacht, Hosien abad	R. Pole Clou (Tri. of Boshar)				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K7-36-3b	Dehno, Sar mour, Kakhdan	R. Pole Clou				
K7-36-3c	-	R. Pole Clou				
K7-36-4	Amir abad, Hasan abad, Saris, Jamal, Bandoun	R. Boshar				
K7-36-5	Dehe bare aftab	R. Seris (Tri. of Boshar)				
K7-37-1	Dhitab, Salehan, Lingan	R. Kabgian (Tri. of Boshar)				
K7-37-2	Naghareh khaneh, Balout karoon, Abe zalou	R. Kabgian				
K7-37-3	-	R. Kabgian				
K7-37-4a	Cheshmeh roci, Vard chat, Dez khalu, Mirghazab, Kal gaz, Jaiil	R. Kabgian				
K7-37-4b	Laruni, Jounak, Ab dareh, Abe chenar, Deh poot	R. Kabgian				
K7-37-5a	Taleh boz, Dareh khani	R. Dashet Roum (Tri. of Boshar)				
K7-37-5b	Cheshmeh tagi, Cheshmeh baloutak, Cheshmeh surkh	R. Dashet Roum				
K7-37-5c	Ali abad, Amir abad vasati	R. Dashet Roum				
K7-37-5d	Habib abad dashte room, Mansur abad, Dolat abad	R. Dashet Roum				
K7-37-5e	-	R. Dashet Roum				
K7-37-5f	Kalle sareh dar	R. Dashet Roum				
K7-37-5g	Par shekoft, Mele bariko, Gozali	R. Dashet Roum				
K7-37-6a	-	R. Sepidar (Tri. of Boshar)				
K7-37-6b	Baghcheh	R. Sepidar				
K7-37-6c	Sepidar, Siseh gorg, Tangab, Bid barzeh, Vajestan	R. Sepidar				
K7-37-6d	Bajouli, Bid miudan, Dareh kall salehi	R. Sepidar				
K7-37-7a	Chaleh siseh	R. Sepidar				
K7-37-7b	-	R. Sepidar				
K7-38	Cham khan, Cheshmeh chenar, Ganjeh	R. Boshar				
K7-39-1	Mehraban, Cheshmeh chenar	Tri. of Boshar				
K7-39-2	Darehgav duli, Dareh saras khun	Tri. of Boshar				
K7-40	Dareh garu, Sar dashte kalous, Sarv bid	Tri. of Boshar				
K7-41-1	Bid shahi, Sarab taveh, Jakeh koreh	R. Boshar				
K7-41-2	Chenarestan, Mour deraz	R. Boshar				
K7-41-3	Ghasr abad	Tri. of Boshar				
K7-42-1	Yasuj faramarzi, Emam zadeh shahzadeh farajollah	R. Boshar	M-Flood, T-D.Flow			
K7-42-2	-	Tri. of Boshar				
K7-43	Deh no, Mahmoud abad, Masoum abad	R. Boshar	M-Flood, T-D.Flow			
K7-44	Dareh dareh	R. Boshar				
K7-45	Vazag, Hamid abademam zadeh abdolah	R. Boshar				
K7-46	Dareh deli sefid	Tri. of Boshar				
K7-47	Cham kareh, Gardoo, Kandalak, Tange mallak abassi	Tri. of Boshar				
K7-48	Tange surkh, Deh toli, Cheshmeh chenar	R. Boshar	F/D.Flow, Sediment	00-8/8		
K7-49	-	Gange gang, Sangan (Tri. of Boshar)				
K7-50	Tange khushk, Tang mishan, Bar dozd	R. Boshar				
K7-51-1	-	Kalle Setengan (Tri. of Boshar)				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K7-51-2	-	Kalle Shirkush (Tri. of Boshar)				
K7-52	Rigan, Barragh, Dokhtar kollun, Deh kohneh	R. Boshar				
K7-53	Sheleh zar	R. Boshar				
K 8 (Main river : Karoon)						
K8-1	-	S.A dam				
K8-2	Darch chel shabeh, Darehe doshalvaroun	S.A dam				
K8-3-1	-	Tange Shirkosk, Ahangari				
K8-3-2	Shalal	Ab. Shalal				
K8-3-3	Sabzab	Ab. Shalal				
K8-4	Nargesi, Takhet sabz, Joft balut, Taraz, Bard pareh, Dobalut, Solimanvandabe, Abe chel, Dehe chel, Abe khar zahre, Takhte sabz	Karoon / S.A dam				
K8-5	Sar hauz balla & paien, Kertez, Ab khar zahreh	Ab. Sarhouz (Tri. of Karoon)				
K8-6-1a	Pirabass	Ab. Shala				
K8-6-1b	Deh jeraz	Ab. Shala				
K8-6-1c	Saleh baroun	Ab. Shala				
K8-6-1d	-	Ab. Shala				
K8-6-1e	Stak, Kidi	Ab. Shala				
K8-6-2a	Chelcheli, Sarbazar, Terdi, Alaki	Ab. Susan				
K8-6-2b	-	Ab. Susan				
K8-6-2c	Muri	Ab. Susan				
K8-6-2d	-	Ab. Susan				
K8-6-2e	Sarbazar	Ab. Susan				
K8-6-3a	-	Tri. of Ab. Shala				
K8-6-3b	Gachi, Babaziar	Tri. of Ab. Shala				
K8-6-3c	Galalak, Chal gourab, Dareh kuh, Gerdab	Tri. of Ab. Shala				
K8-6-4	Retak, Lelar	Ab. Shala				
K8-6-5	-	Ab. Shala				
K8-6-6	Ienuk	Ab. Shala				
K8-6-7	-	Ab. Shala				
K8-7-1a	Saleh, Dareh pir	Dareh Bardeh Nakhesh (Tri. of Karoon)				
K8-7-1b	-	Dareh Bardeh Nakhesh				
K8-7-1c	-	Dareh Bardeh Nakhesh (Dareh Gamzard)				
K8-7-2	-	Trb. of Dareh Bardeh Nakhesh				
K8-8	Dareh bardeh bachshi	Dareh Bardeh Nakhesh				
K8-9	-	Dareh Karta (Tri. of Karoon)				
K8-10	Darak, Gol tardel	Karoon				
K8-11	Sar nafti, Bariyon	Karoon				
K8-12	Sardab, Sarbozoom, Mehraban, Vin abad, Mehrbano, Yekgavi, Mehraban	Karoon				
K8-13a	Pelam, Ta khab	Karoon				
K8-13b	Susan, Ceraya, Deh no, Ab zalu, Deh hoz, Deh kohneh, Gilan, Malviran, Abezaloo, Sorya, Emamzadeh danial, Soryya	Karoon	M-Flood, T-D.Flow	98-4/28	1	-
K8-14	Bandi, Baraftab talkhab, Abni	Tri. of Karoon				
K8-15-1	Kol, Goft gale, Deh gohar almasi, Nonangnu	Karoon, Dareh Landar (Tri. of Karoon)				
K8-15-2	Tardab, Dareh landar	Dareh Landar				

Inventory of Flood/Debris Flow Damage A

Sub-basin	Town, Village	Rivers	Flood/Debris Flow			Previous big flood (years ago)
			Cause	Date of occurance	No. of floods	
K8-16	Gachgan, Abanar, Kd ardode, Abeanar, Sar chat, Sartange call, Cham, Shimeh	Karoon				
K8-17	Faram, Goft galeh, Chel hozan, Shiman, Safi, Dareh kbusi, Ajam gholi	Karoon				
K8-18-1	Falen, Patareh, Mobayeh, Dareh mombain	Dareh Mobayen (Tri. of Karoon)				
K8-18-2	Dareh deli	Dareh Deli (Tri. of Dareh Mobayen)				
K8-18-3	Ky magghusudi	R. Derazna (Dareh Mobayen)				
K8-19a	Pastang, Darch chineh, Pole abdogh, Zango	Karoon				
K8-19b	Dareh kcat	Karoon				
K8-19c	Puzerak	Karoon				
K8-20	Bar pareh	Karoon				
K8-21	Badaumza, Chahr deh, , Dehli chah hejazi	Tri. of Karoon				
K8-22	Bar pareh, Zir khu shalu	Karoon				
K8-23	Rekat shalu, Sebri	Karoon				
K8-24	Baju shalu, Abe gonjeshki, Bonyab, Jalali	Karoon				
K8-25-1a	Shalu	Tri. of Karoon				
K8-25-1b	Dehdez, Lebbid, Ghaleh sard, Sarmasjed, Ghaleh balla sard	Tri. of Karoon	F/D.Flow			
K8-25-2	-	Tri. of Karoon				
K8-26	Darch, Shalu, etc	Karoon				
K8-27	Mohamad, Poshte asiavand, Noshivand	Karoon				
K8-28	Zeras, Shakhaz, Dareh zang, Morzi, Gerdlidan, Sarguf, Dehno	Karoon	M-Flood, T-D.Flow			
K8-29	Darb gharibi, Dehrudjeld, Jalali, Jir ahmad	Karoon				
K8-30	Chaman, Deh nola, Bar aftab, Barez, Bare aftabe balla & palen & bozorg, Jadvallekan, Barjonakfalleh, Dehe molla, Gore parviz	Karoon				

Note : O/F = Over flow, D.Flow = Debris Flow, F/D.Flow = either flood or debris flow, M-Flood = Main river/Flood, T- D.Flow = Tributary/Debris Flow, 96-8/31= 1996, August 31(Date of occurance), HNR = House near river, Small F. = Small Flood, Intake d = Intake dam, Sedi. = Sediment, Tr. = Tree, Tri. = Tributary, S.A.dam = Shahid Abbaspoor Dam

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K 1 (Main river ; Ab. Behesht Abad)														
K 1-1														
K 1-1-2														
K 1-1-3														
K 1-1-4														
K 1-1-5														
K 1-1-6														
K 1-1-7														
K 1-1-8														
K 1-2-1														
K 1-2-2														
K 1-2-3a														
K 1-2-3b														
K 1-2-3c														
K 1-2-3d														
K 1-2-4a														
K 1-2-4b														
K 1-2-5a														
K 1-2-5b														
K 1-2-5c														
K 1-2-5d														
K 1-2-5e														
K 1-2-5f														
K 1-2-5g														
K 1-2-5h														
K 1-2-5i														
K 1-2-5j														
K 1-2-5k														
K 1-2-5l														
K 1-2-5m														
K 1-2-5n														
K 1-2-5o														
K 1-2-5p														
K 1-2-5q														
K 1-2-5r														
K 1-2-5s														
K 1-2-5t														
K 1-2-5u														
K 1-2-6a														
K 1-2-6b														
K 1-2-6c														
K 1-2-6d														
K 1-2-6e														
K 1-2-6f														
K 1-2-6g														
K 1-2-6h														
K 1-2-6i														
K 1-2-6j														
K 1-2-6k														
K 1-2-6l														
K 1-2-6m														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K 1-2-6n														
K 1-2-6o														
K 1-2-6p														
K 1-2-6q														
K 1-2-6r														
K 1-3														
K 1-4-1														
K 1-4-2a														
K 1-4-2b														
K 1-4-2c														
K 1-4-2d														
K 1-4-2e														
K 1-4-3														
K 2 (Main river ; Ab. Kurang)														
K2-1							4.5	0.3			10			
							21.0							
							21.0							
							6.0							0.0
K2-2														
K2-3														
K2-4														
K2-5-1a														
K2-5-1b														
K2-5-2														
K2-5-3														
K2-5-4														
K2-6														
K2-7														
K2-8														
K2-9														
K2-10														
K2-10a														
K2-11														
K2-12														
K2-13														
K2-14														
K2-15														
K2-16														
K 3 (Main river ; Karoon)														
K3-0a														
K3-0b														
K3-0c														
K 3-1-1														
K 3-1-2														
K 3-1-3														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K 3-1-4														
K 3-1-5														
K 3-1-6														
K 3-1-7														
							2.0							
K 3-1-8														
K 3-1-9							4.0		5					
K 3-1-10														
K 3-1-11							5.0							
K 3-1-12														
K 3-1-13														
K 3-1-13a														
K 3-1-14a														
K 3-1-14b														
K 3-1-15														
K 3-1-16							10.0				2			3.0
K 3-1-17														
K 3-1-18														
K 3-1-19														
K 3-2-1														
K 3-2-2							1.0							
							2.0							
K 3-2-3							4.0							0.2
K 3-2-4														
					3	10	0.5							
							0.7				25			

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K 3-2-5														
K 3-2-6														
K 3-2-7														
K 3-3-1														
K 3-3-2a														
K 3-3-2b														
K 3-3-2c														
K 3-3-2d														
K 3-3-2e														
K 3-3-2f														
K 3-3-2g														
K 3-3-2h														
K 3-3-3a														
K 3-3-3b														
K 3-4-1														
K 3-4-2														
K 3-4-3														
K 3-5						*150*	*0.3*			*3*				
K 3-6							15.0			1	1			
K 4 (Main river: Ab. Vanak)														
K4-1-1														
K4-1-2														
K4-1-3														
K4-1-4														
K4-1-5														
K4-1-6														
K4-1-7														
K4-1-7a														
K4-1-7b														
K4-1-7c														
K4-1-7d														
K4-1-7e														
K4-1-7f														
K4-1-7g														
K4-1-7h														
K4-1-7i														
K4-1-7j														
K4-1-7k														
K4-1-7l														
K4-1-7m														
K4-1-7n														
K4-1-8							20.0							
K4-1-8a														
K4-1-8b														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K4-1-9							80.0							
K4-1-10														
K4-1-11														
K4-1-12														
K4-1-13														
K4-1-14														
K4-1-15														
K4-2-1														
K4-3-1														
K4-3-2														
K4-4-1														
K4-4-1a														
K4-4-1b														
K4-4-2a														
K4-4-2b														
K4-4-3														
K 5 (Main river ; Bazoft)														
K5-1														
K5-2														
K5-3														
K5-4														
K5-5														
K5-6														
K5-7														
K5-8														
K5-9														
K5-10														
K5-11														
K5-12														
K5-13-1a														
K5-13-1b														
K5-13-2														
K5-14														
K5-15														
K5-16														
K5-17														
K5-18														
K5-19														
K5-19a														
K5-20														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K5-21														
K5-22														
K5-23	5	3							2		10			
K5-24														
K5-25														
K5-26														
K5-27														
K5-28														
K5-29-1														
K5-29-2														
K5-29-3														
K5-29-4														
K5-30														
K5-31-1														
K5-31-2														
K5-32-1														
K5-32-2														
K5-33														
K 6 (Main river ; Lordegan)														
K6-1-1														
K6-1-2														
K6-1-3														
K6-1-4														
K6-1-5														
K6-1-6														
K6-1-7														
K6-1-8														
K6-1-9														
K6-1-10														
K6-2														
K6-3-1														
K6-3-2														
K6-4-1							8.0							
K6-4-2														
K6-4-3														
K6-4-4														
K6-4-5														
K6-5-1														
K6-6-1														
K 7 (Main river ; Khersan)														
K7-0-1														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K7-0-2														
K7-0-3					3	13	10.0		4	10				
K7-0-4														
K7-0-5					1	30	0.3				3			
						50	20.0							
							3.0		5					
					1		4.0	4.0			4			
K7-0-5-1a														
K7-0-5-1b														
K7-0-5-2														
K7-0-5-3														
K7-0-5-4														
K7-0-5-5														
K7-0-6														
K7-0-6a														
K7-0-7														
K7-0-8														
K7-0-9														
K7-0-10-1							21.0	12.0			3			
K7-0-10-2														
K7-0-10-3a														
K7-0-10-3b														
K7-0-10-4														
K7-0-10-5a														
K7-0-10-5b														
K7-0-10-6a														
K7-0-10-6b														
K7-0-10-6c														
K7-0-10-6d														
K7-0-10-6e														
K7-0-10-6f														
K7-0-10-6g														
K7-0-10-6h														
K7-0-10-6i														
K7-0-10-6j							6.0							
K7-0-10-6k														
K7-0-10-6l														
K7-0-10-6m														
K7-0-10-6n														
K7-0-10-6k														
K7-0-10-6l														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K7-0-10-6m														
K7-0-10-6n														
K7-0-10-6o														
K7-0-10-6p														
K7-0-10-6q														
K7-0-10-6r														
K7-0-10-6s														
K7-0-10-6t														
K7-0-10-7														
K7-0-10-8														
K7-0-10-9														
K7-0-11														
K7-0-12														
K7-0-13-1														
K7-0-13-2														
K7-0-14-1														
K7-0-14-2														
K7-0-14-3														
K7-0-14-4														
K7-0-14-5														
K7-0-15														
K7-0-16														
K7-0-17														
K7-0-18							20.0	10.0						
K7-0-19-1														
K7-0-19-2														
K7-0-20a														
K7-0-20b														
K7-0-21														
K7-0-22														
K7-0-23														
K7-0-24														
K7-1														
K7-2														
K7-3														
K7-4														
K7-5-1														
K7-5-2														
K7-5-3														
K7-5-4														
K7-5-5														
K7-5-6														
K7-6-1														
K7-6-2														
K7-7														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K7-8														
K7-9														
K7-10														
K7-11														
K7-12-1														
K7-12-2														
K7-12-3														
K7-13														
K7-14														
K7-15														
K7-16														
K7-17														
K7-18														
K7-19														
K7-20														
K7-21														
K7-22														
K7-23														
K7-24-1														
K7-24-2														
K7-24-3														
K7-24-4														
K7-25														
K7-26														
K7-27														
K7-28														
K7-29														
K7-30														
K7-31														
K7-32-1														
K7-32-2														
K7-33														
K7-34-1														
K7-34-2														
K7-35-1														
K7-35-2														
K7-35-3														
K7-36-1														
K7-36-2														
K7-36-3														
K7-36-3a														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K7-36-3b														
K7-36-3c														
K7-36-4														
K7-36-5														
K7-37-1														
K7-37-2														
K7-37-3														
K7-37-4a														
K7-37-4b														
K7-37-5a														
K7-37-5b														
K7-37-5c														
K7-37-5d														
K7-37-5e														
K7-37-5f														
K7-37-5g														
K7-37-6a														
K7-37-6b														
K7-37-6c														
K7-37-6d														
K7-37-7a														
K7-37-7b														
K7-38														
K7-39-1														
K7-39-2														
K7-40														
K7-41-1														
K7-41-2														
K7-41-3														
K7-42-1														
K7-42-2														
K7-43														
K7-44														
K7-45														
K7-46														
K7-47														
K7-48							4.0	7.0						
K7-49														
K7-50														
K7-51-1														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K7-51-2														
K7-52														
K7-53														
K 8 (Main river : Karoon)														
K8-1														
K8-2														
K8-3-1														
K8-3-2														
K8-3-3														
K8-4														
K8-5														
K8-6-1a														
K8-6-1b														
K8-6-1c														
K8-6-1d														
K8-6-1e														
K8-6-2a														
K8-6-2b														
K8-6-2c														
K8-6-2d														
K8-6-2e														
K8-6-3a														
K8-6-3b														
K8-6-3c														
K8-6-4														
K8-6-5														
K8-6-6														
K8-6-7														
K8-7-1a														
K8-7-1b														
K8-7-1c														
K8-7-2														
K8-8														
K8-9														
K8-10														
K8-11														
K8-12														
K8-13a														
K8-13b	1				20	400						20.0		
K8-14														
K8-15-1														
K8-15-2														

Inventory of Flood/Debris Flow Damage B

Sub-basin	Damage for Human			Livestock Damage			Agricultural Damage (ha)		Damage for Houses (Nos.)			Roads (km)		
	Killed	Lost	Injured	Chick	Cow	Sheep	Farm	Garden	70~ %	30-70 %	0-30 %	Paved	Gravel	Vil.
K8-16														
K8-17														
K8-18-1														
K8-18-2														
K8-18-3														
K8-19a														
K8-19b														
K8-19c														
K8-20														
K8-21														
K8-22														
K8-23														
K8-24														
K8-25-1a														
K8-25-1b														
K8-25-2														
K8-26														
K8-27														
K8-28														
K8-29														
K8-30														

Note: Chick = Chicken, Roads; Vil. = Village road

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
								(Mil.R)	d	m	s	d	m	s	
K 1 (Main river ; Ab. Behesht Abad)															
K 1-1						FP, P. house			32	1	57	50	37	30	
K 1-1-2															
K 1-1-3									32	13	30	50	37	30	
K 1-1-4									32	13	30	50	33	30	
K 1-1-5									32	15	30	50	33	30	
									32	16	0	50	33	30	
									32	16	30	50	32	0	
K 1-1-6															
K 1-1-7									32	16	0	50	32	0	
K 1-1-8															
K 1-2-1															
K 1-2-2															
K 1-2-3a															
K 1-2-3b									32	2	30	50	46	30	
K 1-2-3c															
K 1-2-3d															
K 1-2-4a															
K 1-2-4b															
K 1-2-5a															
K 1-2-5b															
K 1-2-5c															
K 1-2-5d															
K 1-2-5e															
K 1-2-5f															
K 1-2-5g									31	58	30	51	7	30	
K 1-2-5h															
K 1-2-5i															
K 1-2-5j									31	57	30	51	17	30	
K 1-2-5k									31	56	7	51	19	0	
K 1-2-5l															
K 1-2-5m									31	58	30	51	18	0	
K 1-2-5n															
K 1-2-5o															
K 1-2-5p															
K 1-2-5q															
K 1-2-5r															
K 1-2-5s															
K 1-2-5t															
K 1-2-5u															
K 1-2-6a									32	10	0	50	51	0	
K 1-2-6b									32	10	0	50	50	17	
K 1-2-6c									32	13	0	50	50	0	
K 1-2-6d									32	16	40	50	58	45	
K 1-2-6e															
K 1-2-6f									32	17	30	51	5	0	
K 1-2-6g															
K 1-2-6h															
K 1-2-6i									32	19	0	50	52	30	
K 1-2-6j															
K 1-2-6k															
K 1-2-6l															
K 1-2-6m									32	13	0	50	47	0	

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K 1-2-6n															
K 1-2-6o															
K 1-2-6p															
K 1-2-6q															
K 1-2-6r															
K 1-3									32	9	0	50	41	0	
K 1-4-1									32	13	0	50	36	0	
									32	14	18	50	37	0	
K 1-4-2a															
K 1-4-2b															
K 1-4-2c															
K 1-4-2d															
K 1-4-2e															
K 1-4-3															
K 2 (Main river ; Ab. Kurang)															
K2-1			1.00		1		A	31.8	32	4	19	50	33	46	
									32	5	8	50	34	21	
								12.0	32	3	28	50	35	0	
								1.0	32	3	28	50	35	0	
									32	8	20	50	32	42	
									32	53	15	50	37	35	
K2-2															
K2-3															
K2-4															
K2-5-1a															
K2-5-1b															
K2-5-2															
K2-5-3															
K2-5-4															
K2-6															
K2-7															
K2-8															
K2-9															
K2-10															
K2-10a															
K2-11															
K2-12															
K2-13															
K2-14															
K2-15															
K2-16															
K 3 (Main river ; Karoon)															
K3-0a															
K3-0b															
K3-0c															
K 3-1-1															
K 3-1-2															
K 3-1-3															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
								(Mil.R)	d	m	s	d	m	s	
K 3-1-4															
K 3-1-5															
K 3-1-6															
K 3-1-7									31	40	30	50	43	52	
								15.0	31	40	30	50	43	52	
K 3-1-8															
K 3-1-9			0.20			3 elec. line	N	254.6	31	43	41	50	51	28	
									31	44	37	50	52	31	
							N		31	42	0	50	52	36	
K 3-1-10															
K 3-1-11						7pumps	N	150.0	31	50	0	50	40	0	Doorak-anari (old name)
									31	48	18	50	40	5	
K 3-1-12															
K 3-1-13						P. tools			31	53	53	51	36	0	
K 3-1-13a															
K 3-1-14a															
K 3-1-14b															
K 3-1-15															
K 3-1-16			1.00			Fish p.	N	229.0	31	57	5	50	22	17	
								no	31	58	27	50	24	40	
K 3-1-17															
K 3-1-18															
K 3-1-19															
K 3-2-1															
K 3-2-2				1			A	10.7	31	41	13	50	36	24	
	1						A	21.7	31	40	50	51	38	21	Incl. Ghaeedan
K 3-2-3				1			A	73.8	31	44	18	50	33	26	Incl. Malek shir
K 3-2-4				1			A		31	44	18	50	33	8	
							A	11.4	31	43	32	50	34	32	
				1			A	99.5	31	41	43	50	36	4	
				1			A		31	41	15	50	36	24	

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
							A		31	40	25	50	36	53	
K 3-2-5				5	1	W. pipe			31	45	0	50	32	54	
K 3-2-6															
K 3-2-7															
K 3-3-1															
K 3-3-2a									31	54	28	50	42	11	
K 3-3-2b															
K 3-3-2c															
K 3-3-2d															
K 3-3-2e															
K 3-3-2f															
K 3-3-2g															
K 3-3-2h															
K 3-3-3a															
K 3-3-3b															
K 3-4-1						F P.			31	58	6	50	33	54	
K 3-4-2				1					31	59	3	50	33	26	
K 3-4-3															
K 3-5	2		0.08	1		3 elec. line	N	61.0	31	57	26	50	27	11	
K 3-6							N	31.2	32	3	14	50	24	13	
K 4 (Main river : Ab. Vanak)															
K4-1-1															
K4-1-2															
K4-1-3															
K4-1-4			2						31	30	0	51	18	45	
K4-1-5															
K4-1-6									31	36	54	51	14	32	
K4-1-7									31	39	11	51	13	58	
K4-1-7a															
K4-1-7b															
K4-1-7c															
K4-1-7d															
K4-1-7e															
K4-1-7f															
K4-1-7g															
K4-1-7h															
K4-1-7i															
K4-1-7j															
K4-1-7k															
K4-1-7l															
K4-1-7m															
K4-1-7n															
K4-1-8									31	45	19	51	8	17	
K4-1-8a									31	45	0	51	18	17	
K4-1-8b															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K4-1-9		10		10					31	46	13	51	6	24	
									31	48	23	51	5	22	
K4-1-10															
K4-1-11	1								31	51	54	51	5	38	
									31	57	42	51	5	40	
	1								31	53	23	51	9	13	
K4-1-12									31	56	20	51	4	0	
									31	55	40	51	4	0	
									31	55	30	51	3	30	
K4-1-13															
K4-1-14															
K4-1-15															
K4-2-1															
K4-3-1															
K4-3-2															
K4-4-1															
K4-4-1a															
K4-4-1b															
K4-4-2a															
K4-4-2b															
K4-4-3															
K 5 (Main river ; Bazoft)															
K5-1															
K5-2															
K5-3															
K5-4															
K5-5															
K5-6															
K5-7															
K5-8															
K5-9															
K5-10															
K5-11															
K5-12															
K5-13-1a															
K5-13-1b															
K5-13-2															
K5-14															
K5-15															
K5-16															
K5-17															
K5-18															
K5-19															
K5-19a															
K5-20							A		32	12	34	50	7	30	
							N		32	12	39	50	6	38	

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
								(Mil.R)	d	m	s	d	m	s	
							N		32	12	21	50	6	34	
							N		32	12	21	50	5	19	
K5-21							N		32	11	37	50	3	45	
							N		32	12	49	50	3	26	
							N		32	12	58	50	3	26	
							N		32	13	23	50	3	45	
K5-22															
K5-23								600.0	32	18	28	50	1	24	Incl. Dorak sofla
									32	15	20	50	1	53	
K5-24															
K5-25															
K5-26															
K5-27															
K5-28															
K5-29-1															
K5-29-2															
K5-29-3															
K5-29-4															
K5-30															
K5-31-1															
K5-31-2															
K5-32-1															
K5-32-2															
K5-33															
K 6 (Main river ; Lordegan)															
K6-1-1															
K6-1-2															
K6-1-3															
K6-1-4															
K6-1-5															
K6-1-6									31	31	20	50	50	0	
K6-1-7															
K6-1-8															
K6-1-9															
K6-1-10															
K6-2									31	32	10	50	37	24	
K6-3-1															
K6-3-2															
K6-4-1								41.0	31	30	49	50	47	49	rdarreh chenar ; incl.
									31	30	20	50	50	0	
K6-4-2															
K6-4-3															
K6-4-4															
K6-4-5															
K6-5-1															
K6-6-1															
K 7 (Main river ; Khersan)															
K7-0-1															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
								(Mil.R)	d	m	s	d	m	s	
K7-0-2															
K7-0-3					1		N	123.1	31	18	34	51	7	24	
K7-0-4															
K7-0-5							N	6.6	31	18	6	51	9	13	
					1		N	31.0	31	16	50	51	9	41	
							N	53.0	31	17	18	51	9	4	
							N	18.9	31	15	24	51	10	37	
K7-0-5-1a															
K7-0-5-1b															
K7-0-5-2															
K7-0-5-3															
K7-0-5-4															
K7-0-5-5															
K7-0-6															
K7-0-6a															
K7-0-7															
K7-0-8															
K7-0-9															
K7-0-10-1	1		5	15					31	8	55	51	25	19	
K7-0-10-2									31	10	7	51	26	58	
K7-0-10-3a															
K7-0-10-3b															
K7-0-10-4															
K7-0-10-5a															
K7-0-10-5b															
K7-0-10-6a															
K7-0-10-6b															
K7-0-10-6c															
K7-0-10-6d															
K7-0-10-6e															
K7-0-10-6f															
K7-0-10-6g															
K7-0-10-6h															
K7-0-10-6i															
K7-0-10-6j			3	1					31	13	18	51	46	49	Hann dam / 98
K7-0-10-6k									31	17	2	51	47	24	
K7-0-10-6l															
K7-0-10-6m															
K7-0-10-6n															
K7-0-10-6k									31	17	2	51	47	24	
K7-0-10-6l															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K7-0-10-6m															
K7-0-10-6n															
K7-0-10-6o															
K7-0-10-6p															
K7-0-10-6q															
K7-0-10-6r															
K7-0-10-6s															
K7-0-10-6t															
K7-0-10-7															
K7-0-10-8															
K7-0-10-9									31	25	0	51	34	30	
K7-0-11															
K7-0-12															
K7-0-13-1															
K7-0-13-2															
K7-0-14-1															
K7-0-14-2															
K7-0-14-3															
K7-0-14-4															
K7-0-14-5															
K7-0-15															
K7-0-16															
K7-0-17															
K7-0-18	2		20	10					30	56	40	51	37	30	
K7-0-19-1									30	56	5	51	37	54	
K7-0-19-2									30	55	58	51	34	13	
K7-0-20a									31	55	52	51	38	45	
K7-0-20b									30	52	13	51	39	0	
K7-0-21									30	53	47	51	42	6	
K7-0-22									30	48	42	51	44	38	
K7-0-23									30	45	40	51	45	13	
K7-0-24									30	49	49	51	44	26	
K7-1									31	30	37	50	25	0	
K7-2									31	30	54	50	25	56	
K7-3															
K7-4															
K7-5-1															
K7-5-2															
K7-5-3															
K7-5-4															
K7-5-5															
K7-5-6															
K7-6-1															
K7-6-2															
K7-7															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K7-8															
K7-9															
K7-10															
K7-11															
K7-12-1															
K7-12-2															
K7-12-3															
K7-13															
K7-14															
K7-15															
K7-16															
K7-17															
K7-18															
K7-19															
K7-20															
K7-21															
K7-22															
K7-23															
K7-24-1															
K7-24-2															
K7-24-3															
K7-24-4															
K7-25															
K7-26															
K7-27															
K7-28															
K7-29															
K7-30															
K7-31															
K7-32-1															
K7-32-2															
K7-33															
K7-34-1															
K7-34-2															
K7-35-1															
K7-35-2															
K7-35-3															
K7-36-1															
K7-36-2															
K7-36-3															
K7-36-3a															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K7-36-3b															
K7-36-3c															
K7-36-4															
K7-36-5															
K7-37-1															
K7-37-2															
K7-37-3															
K7-37-4a															
K7-37-4b															
K7-37-5a															
K7-37-5b															
K7-37-5c															
K7-37-5d															
K7-37-5e															
K7-37-5f															
K7-37-5g															
K7-37-6a															
K7-37-6b															
K7-37-6c															
K7-37-6d															
K7-37-7a															
K7-37-7b															
K7-38															
K7-39-1															
K7-39-2															
K7-40															
K7-41-1															
K7-41-2															
K7-41-3															
K7-42-1									30	40	19	51	36	11	
K7-42-2															
K7-43									30	39	31	51	36	53	
K7-44															
K7-45															
K7-46															
K7-47															
K7-48			2						30	27	37	51	47	31	Flood/Every year
K7-49															
K7-50															
K7-51-1															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K7-51-2															
K7-52															
K7-53															
K 8 (Main river : Karoon)															
K8-1															
K8-2															
K8-3-1															
K8-3-2															
K8-3-3															
K8-4															
K8-5															
K8-6-1a															
K8-6-1b															
K8-6-1c															
K8-6-1d															
K8-6-1e															
K8-6-2a															
K8-6-2b															
K8-6-2c															
K8-6-2d															
K8-6-2e															
K8-6-3a															
K8-6-3b															
K8-6-3c															
K8-6-4															
K8-6-5															
K8-6-6															
K8-6-7															
K8-7-1a															
K8-7-1b															
K8-7-1c															
K8-7-2															
K8-8															
K8-9															
K8-10															
K8-11															
K8-12															
K8-13a															
K8-13b				3				4,152.0	32	2	21	49	49	41	
K8-14															
K8-15-1															
K8-15-2															

Inventory of Flood/Debris Flow Damage C

Sub-basin	Infrastructure							Total damage (Mil.R)	Coordinate						Remarks
	Ganat	Well	Canal	Bridge	Spring	Others	Study		Latitude			Longitude			
									d	m	s	d	m	s	
K8-16															
K8-17															
K8-18-1															
K8-18-2															
K8-18-3															
K8-19a															
K8-19b															
K8-19c															
K8-20															
K8-21															
K8-22															
K8-23															
K8-24															
K8-25-1a															
K8-25-1b									31	44	36	50	15	56	
K8-25-2															
K8-26															
K8-27															
K8-28									31	38	7	50	16	34	
K8-29															
K8-30															

Note: Mil. R = Million Reals, FP. = Fish pond, P. house = Pump house, elec. line = electricity line, P. tools = Pump tools, Study : A = Available, N = Not available, W. pipe = Water pipe