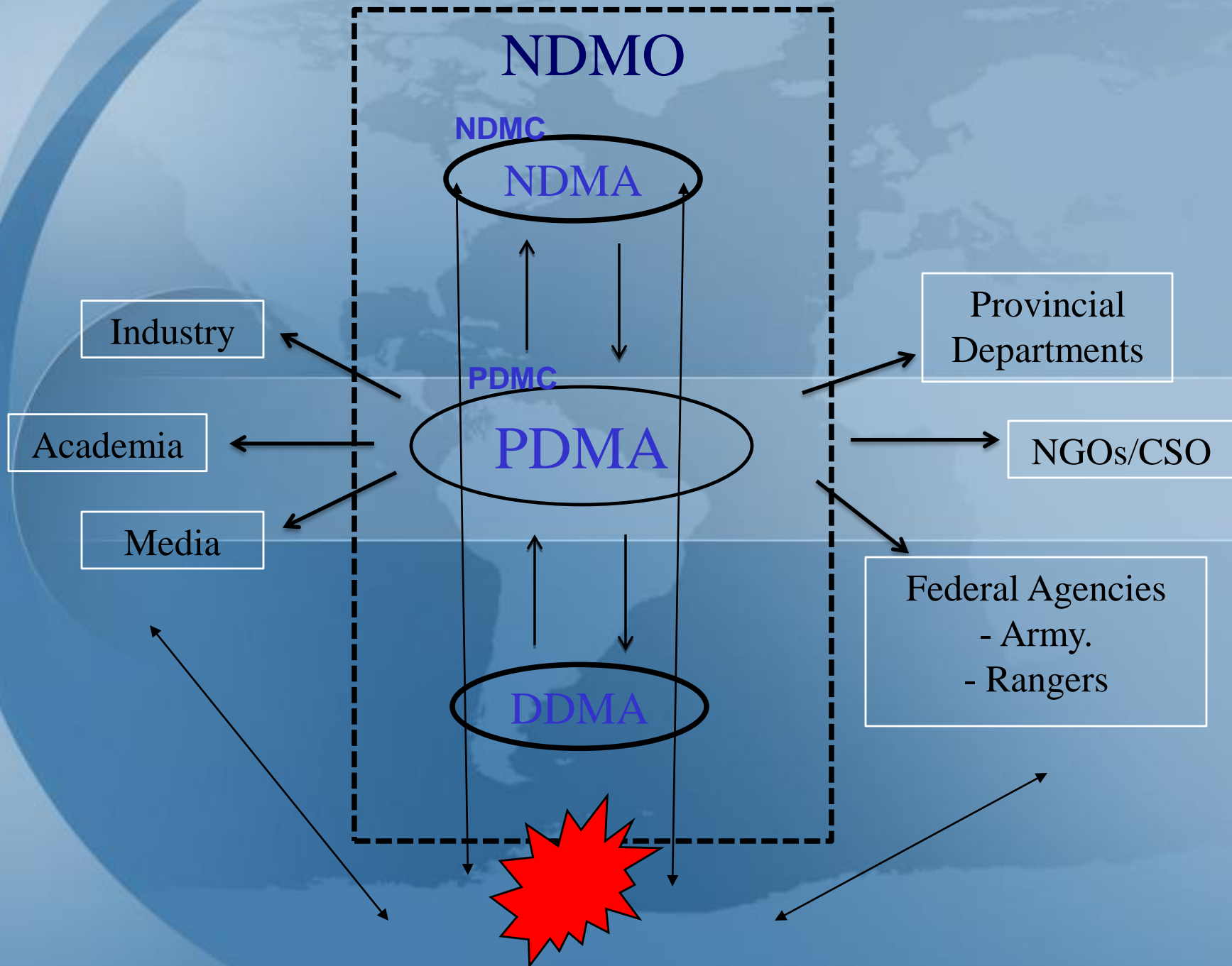


Flood-2010



Disaster Management Apparatus in Sindh





FLOOD 2010

RELATIVE SEVERITY OF FLOODS PER DISTRICT IN SINDH

SR. NO.	DISTRICT	FLOODS
1	Karachi	5
2	Thatta	3
3	Badin	5
4	Thaparkar	1
5	UmarKot	1
6	Mirpurkhas	3
7	Tando Allah Yar	3
8	Tando Md.Khan	3
9	Hyderabad	2
10	Matiari	3
11	Shaheed Benazirabad	3
12	Naushahro Feroze	3

SR. NO.	DISTRICT	FLOODS
13	Khairpur	3
14	Sukkur	2
15	Ghotki	3
16	Shikarpur	2
17	Kashmore	3
18	Jacobabad	2
19	Larkana	2
20	Kambar	4
21	Dadu	4
22	Jamshoro	1
23	Sanghar	1

Source : BOR Sindh

Scoring Keys: Very High 5, High 4, Medium 3, Low 2, Very Low 1

Floods / Rains Some Basic Facts

- ☐ **Topography of Sindh is almost flat**
- ☐ **Located at bottom of Indus basin**
- ☐ **Surplus water including monsoon has to pass through Sindh**
- ☐ **Hill torrents emanating from Baluchistan also add pressure on both account**
- ☐ **River Indus is dangerous because it flows at ridge and in case of breach, out flowing water can not be drained back into the river at any point**

FLOOD LIMITS

(In Lacs of Cusecs)

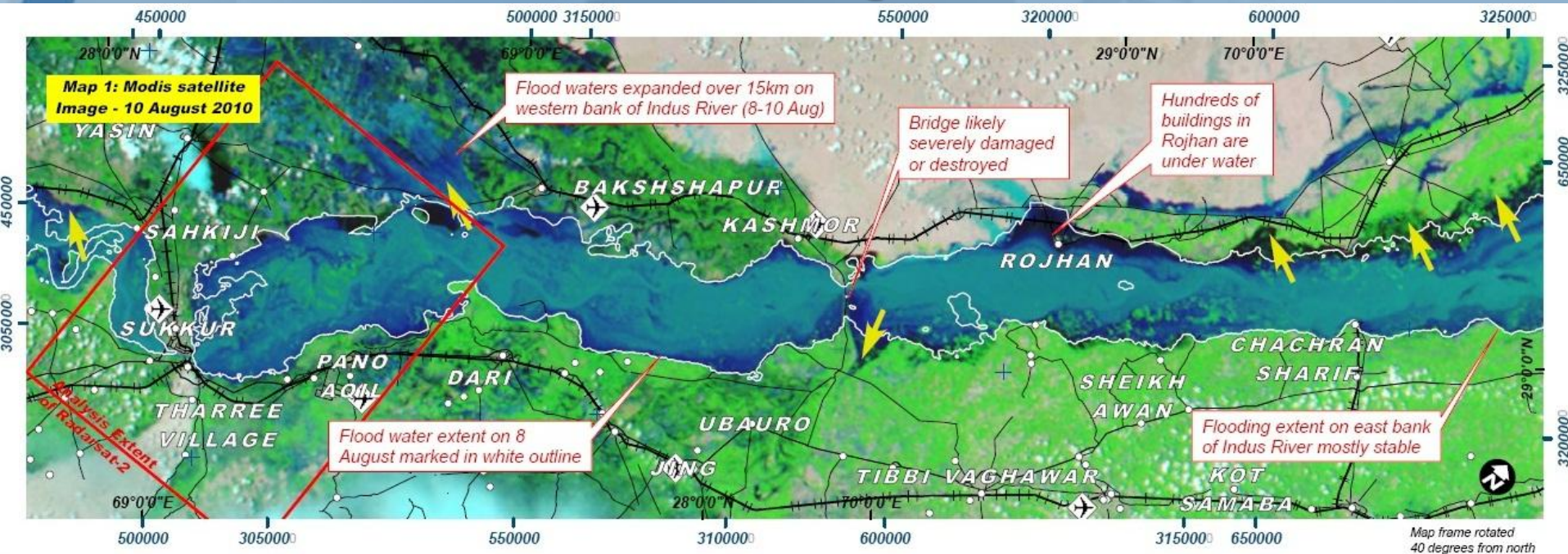
SITE	DESIGN CAPACITY	LOW FLOOD	MEDIUM FLOOD	HIGH FLOOD	VERY HIGH FLOOD	EXCEPTION ALLY HIGH FLOOD
GUDDU	12.0	2.0	3.5	5.0	7.0	9.0
SUKKUR	9.0	2.0	3.5	5.0	7.0	9.0
KOTRI	8.5	2.0	3.5	4.5	6.5	8.0

The background of the slide is a stylized, semi-transparent blue globe showing the outlines of continents. A thick, white horizontal band runs across the middle of the image, serving as a backdrop for the title text.

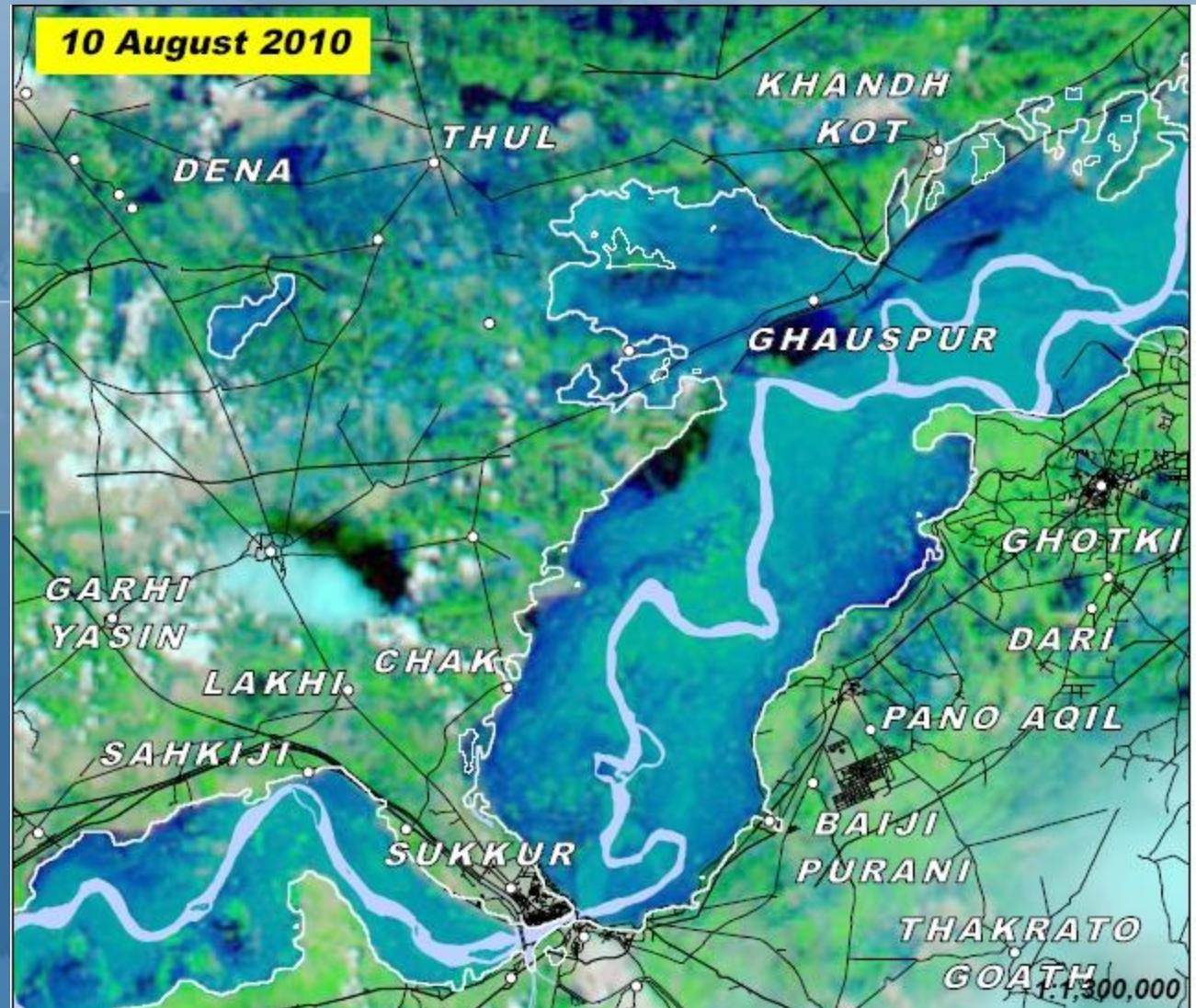
Flood Movement

MOVEMENT OF FLOOD

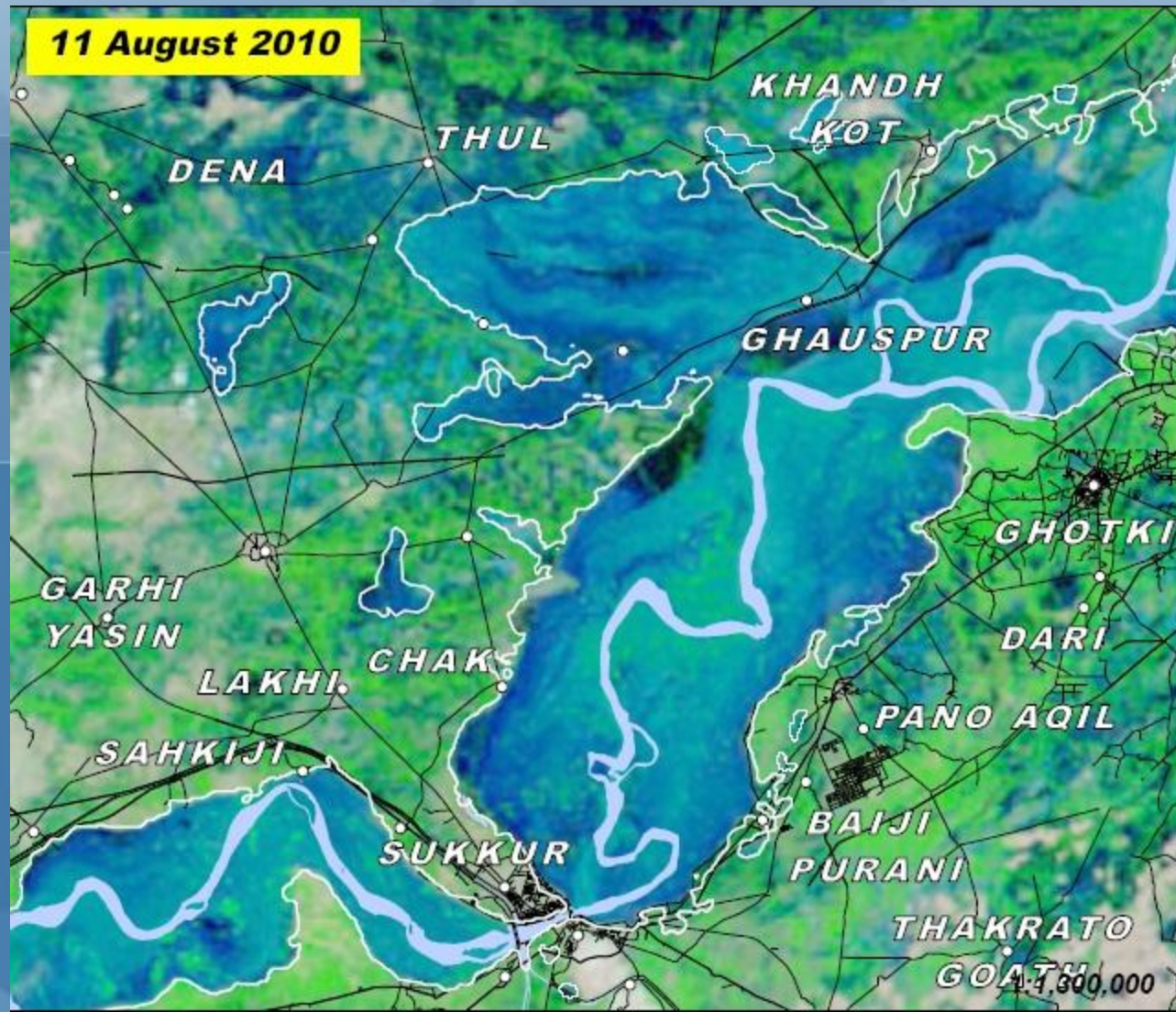
As on 10th August 2010



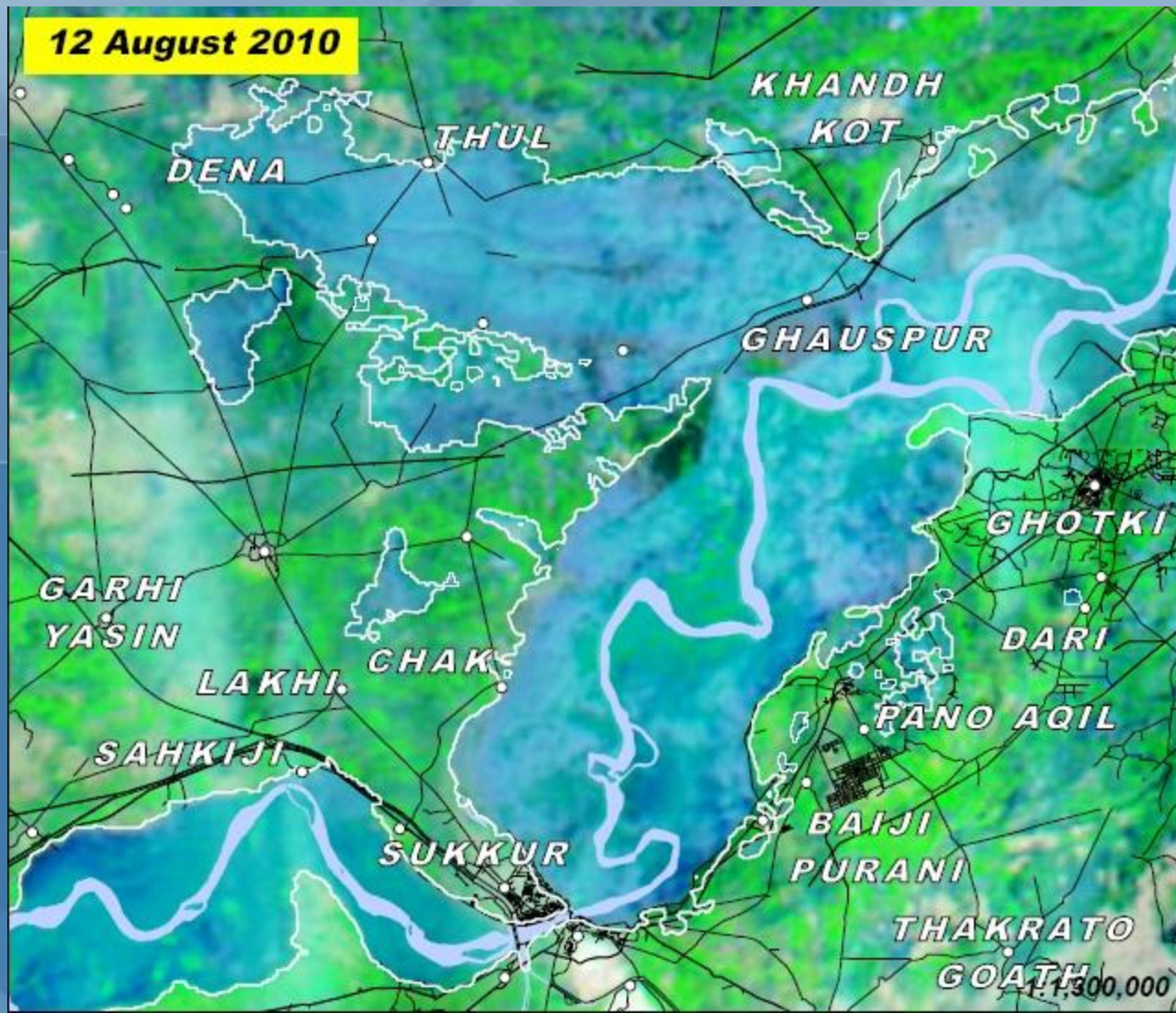
FLOOD WATER INUNDATED GHANSPUR ON 10th August

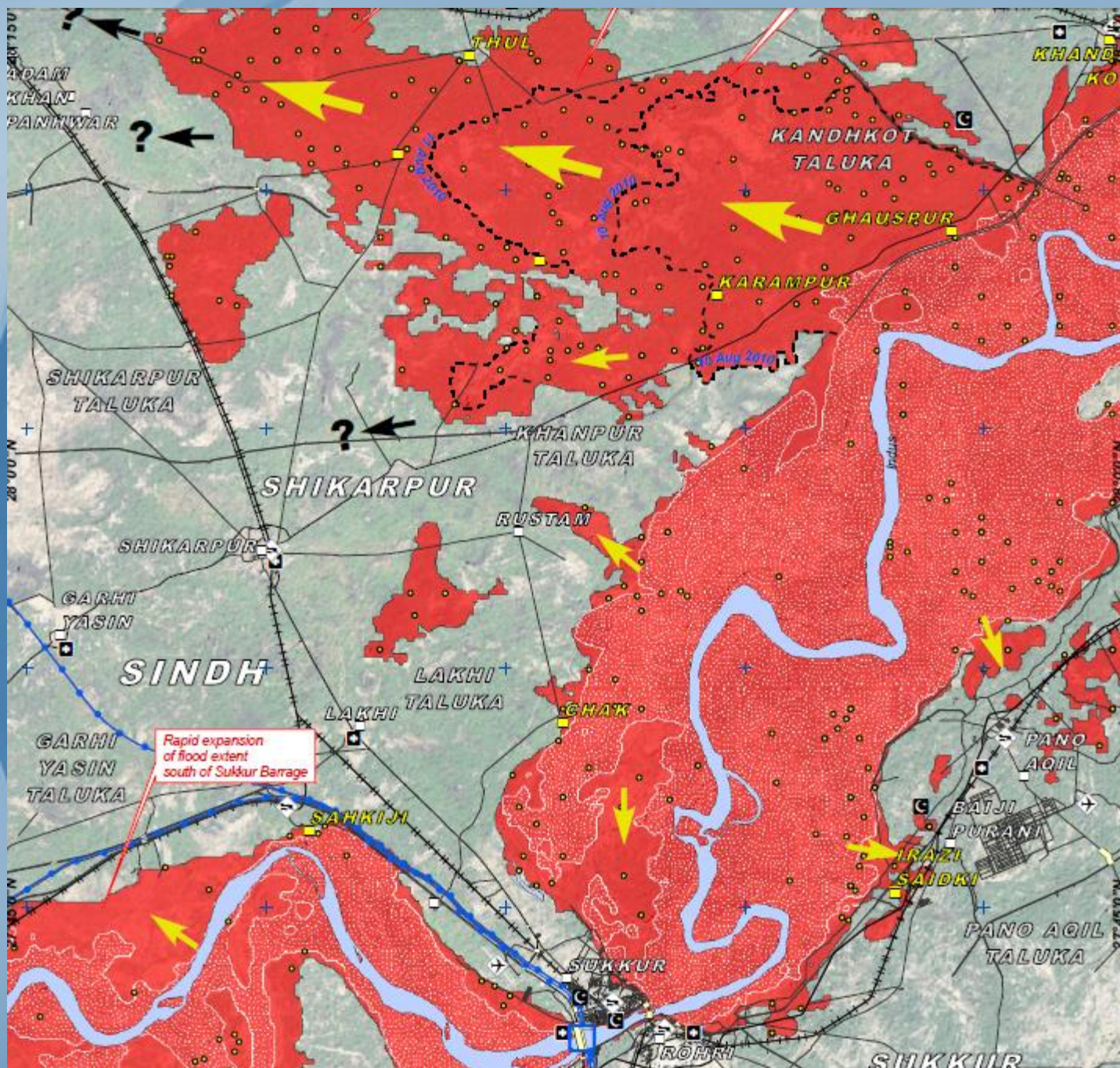


FLOOD WATER INUNDATED KARAMPUR ON 11th August



FLOOD WATER INUNDATED THUL ON 12th August





- Jacobabad under water 300,000 displaced

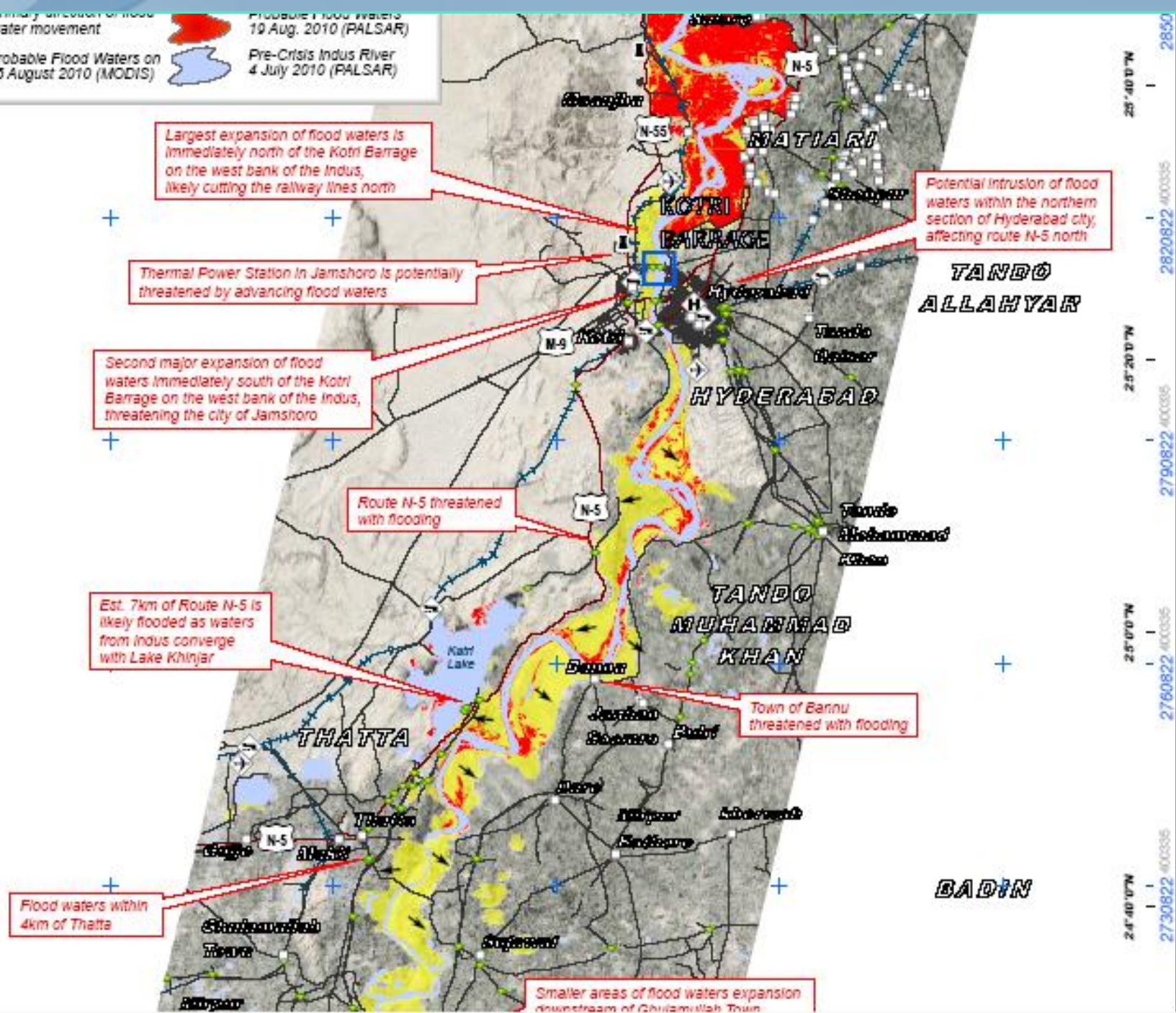
- Kashmore already under water and approximately 260,000 displaced

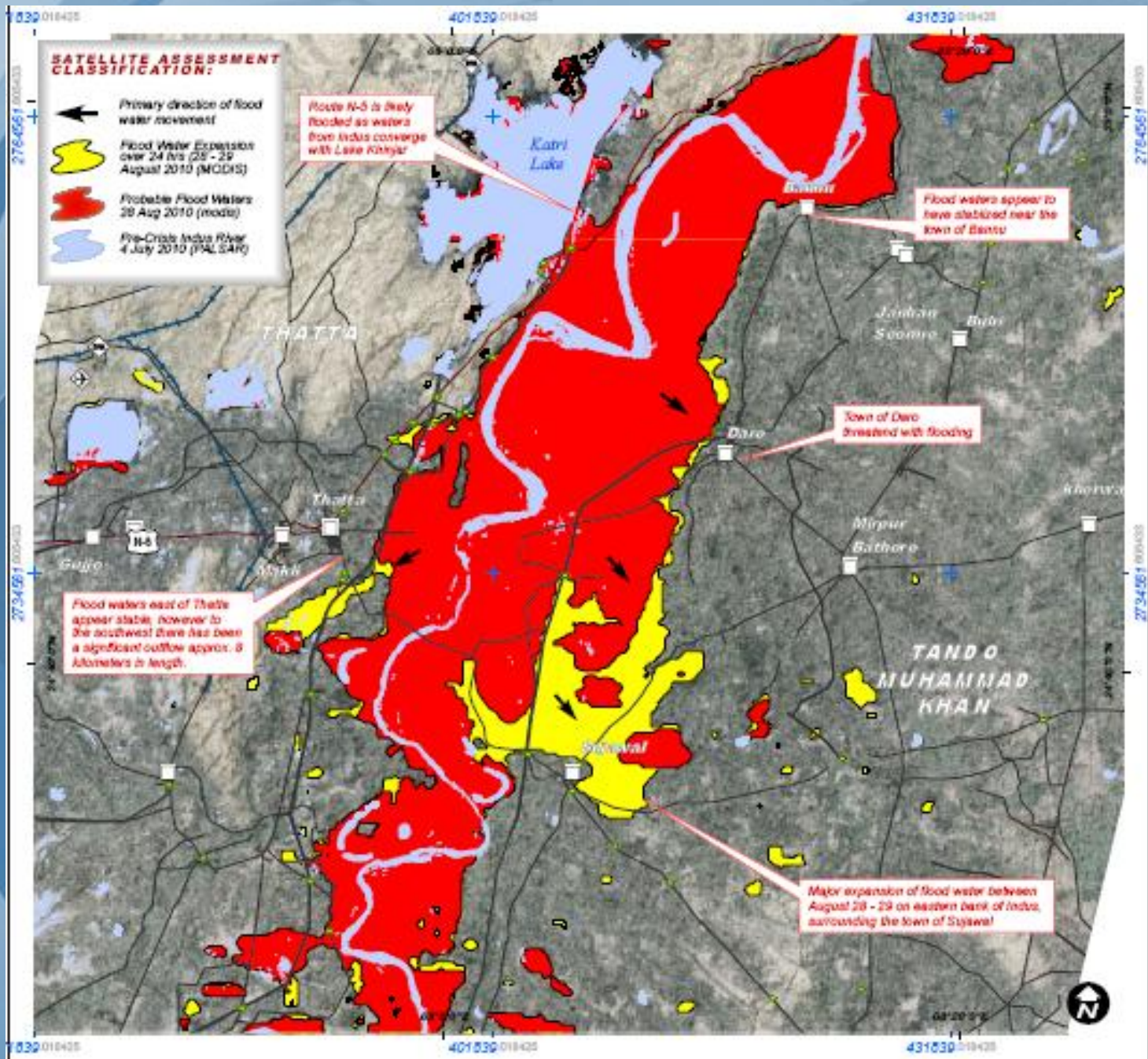
- Shikarpur 60% under water

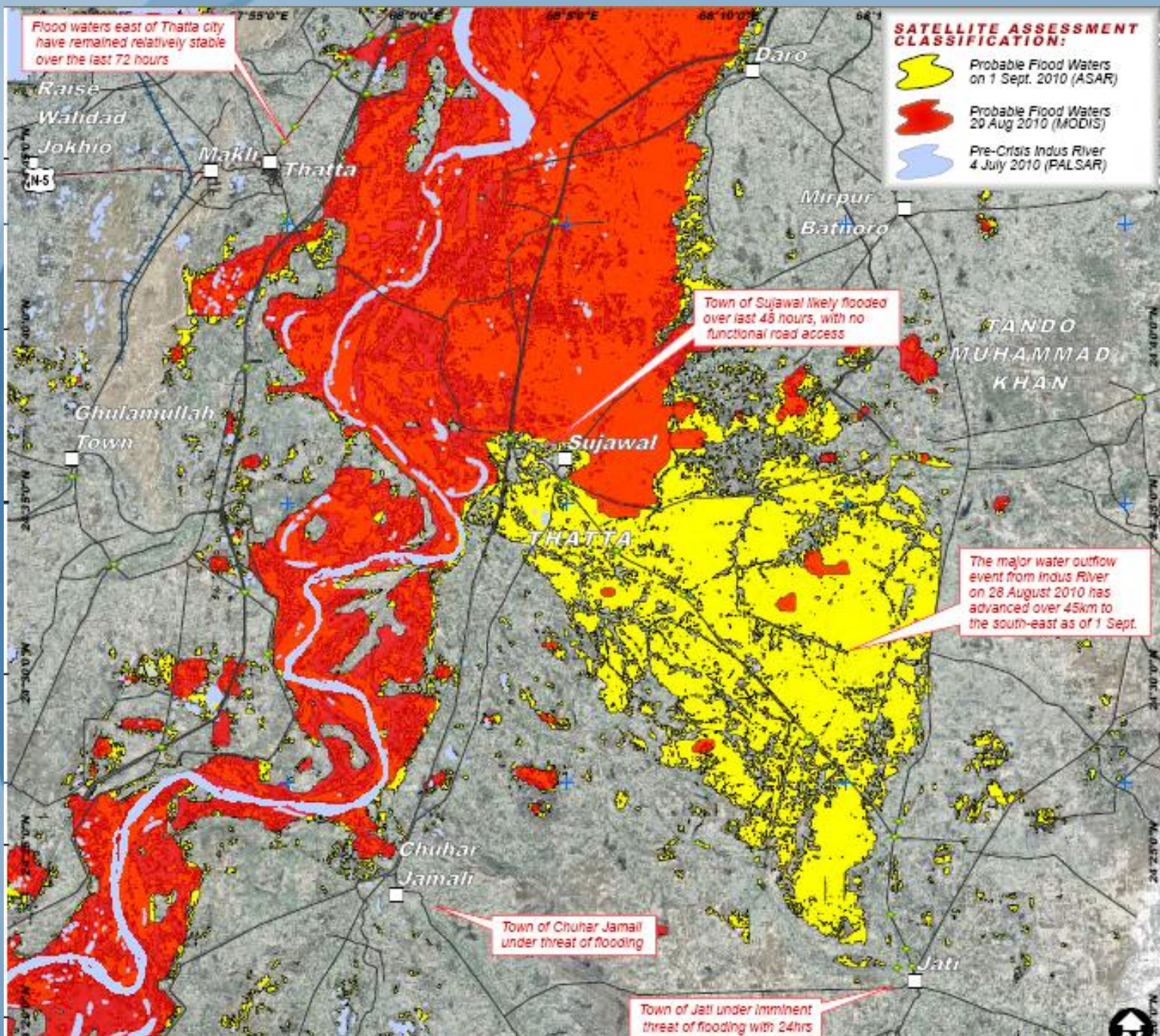
- Sukkur and Khairpur Hosting majority of the displaced population

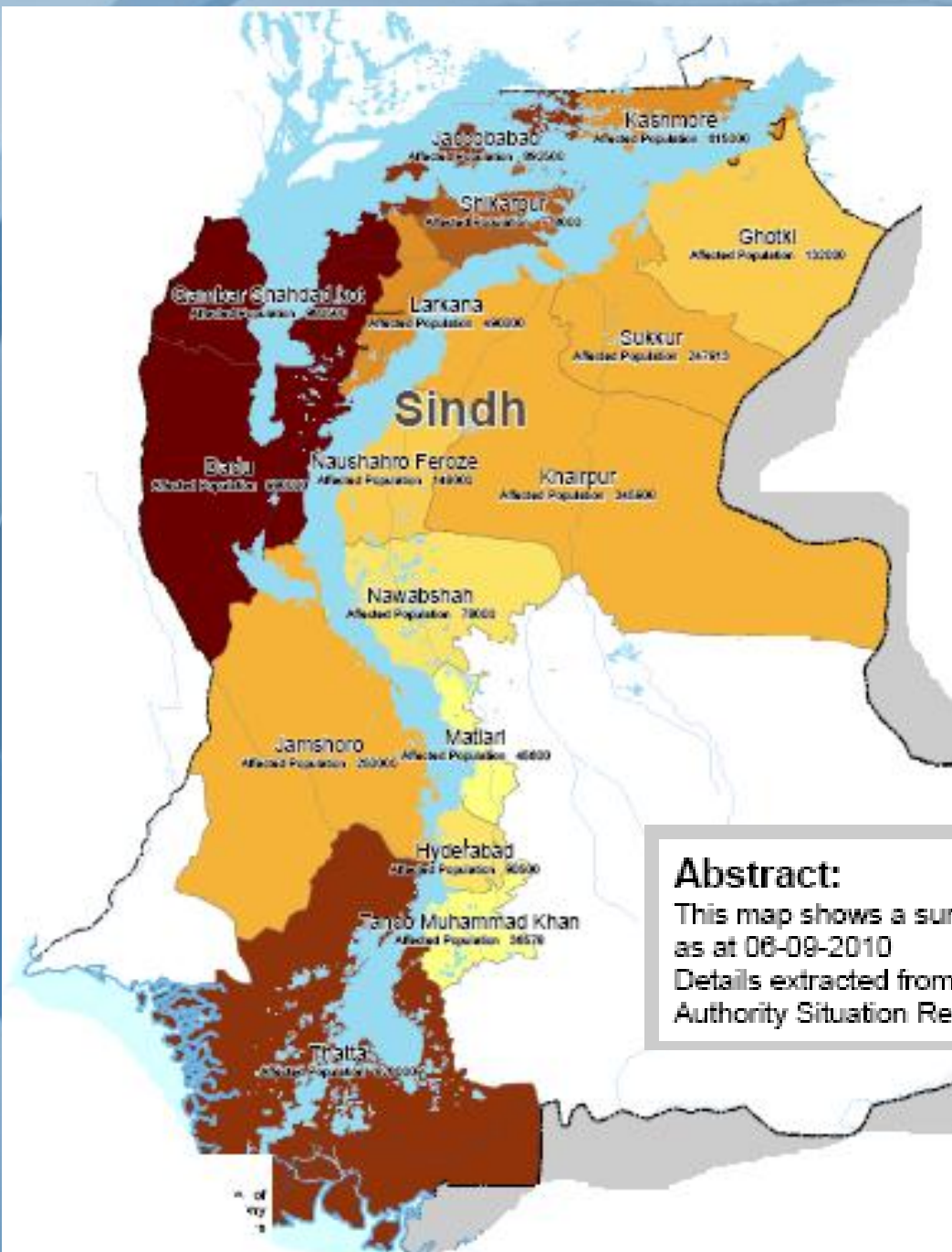
- Water moving towards Dadu and Larkana

- More floods entered Sindh on 14th Aug and will pressure on Guddu and Sukkur barrage









Legend

No. of Affected Persons (06/09/2010)



Abstract:

This map shows a summary of the situation in the Province of Sindh as at 06-09-2010

Details extracted from Government of Sindh Provincial Disaster Management Authority Situation Report 05-09-2010 2200 PST:



Damages

As on 08-09-2010

DAMAGES CAUSED DUE TO RAIN/FLOOD-2010

District	Village Affected	Persons Affected	Area Affected (in acres)	Crop Area Affted (in acres)	Houses Damage s	Cattle head	Relief Camps Estab:	Persons in R-Camps
Kashmore	1,000	615,000	455,624	400,124	93,182	17,500	47	164,568
Shikarpur	1,359	790,000	401,831	110,189	119,697	838	322	80,831
Sukkur	130	247,913	255,058	102,300	37,563	124,448	231	106,479
Ghotki	133	132,000	158,590	105,157	20,000	41,778	171	45,600
Jacobabad	1,123	892,500	1,017,712	687,000	135,227	615	36	21,000
Larkana	115	490,000	74,480	25,028	74,242	R.A	649	133,689
Qambar Shahdadkot	550	1,050,000	965,340	497,380	159,091	44,039	145	55,880
Khairpur	287	345,900	589,251	46,055	52,409	32,290	447	100,699
Naushehro feroze	223	148,000	133,576	52,600	22,424	-	207	23,491

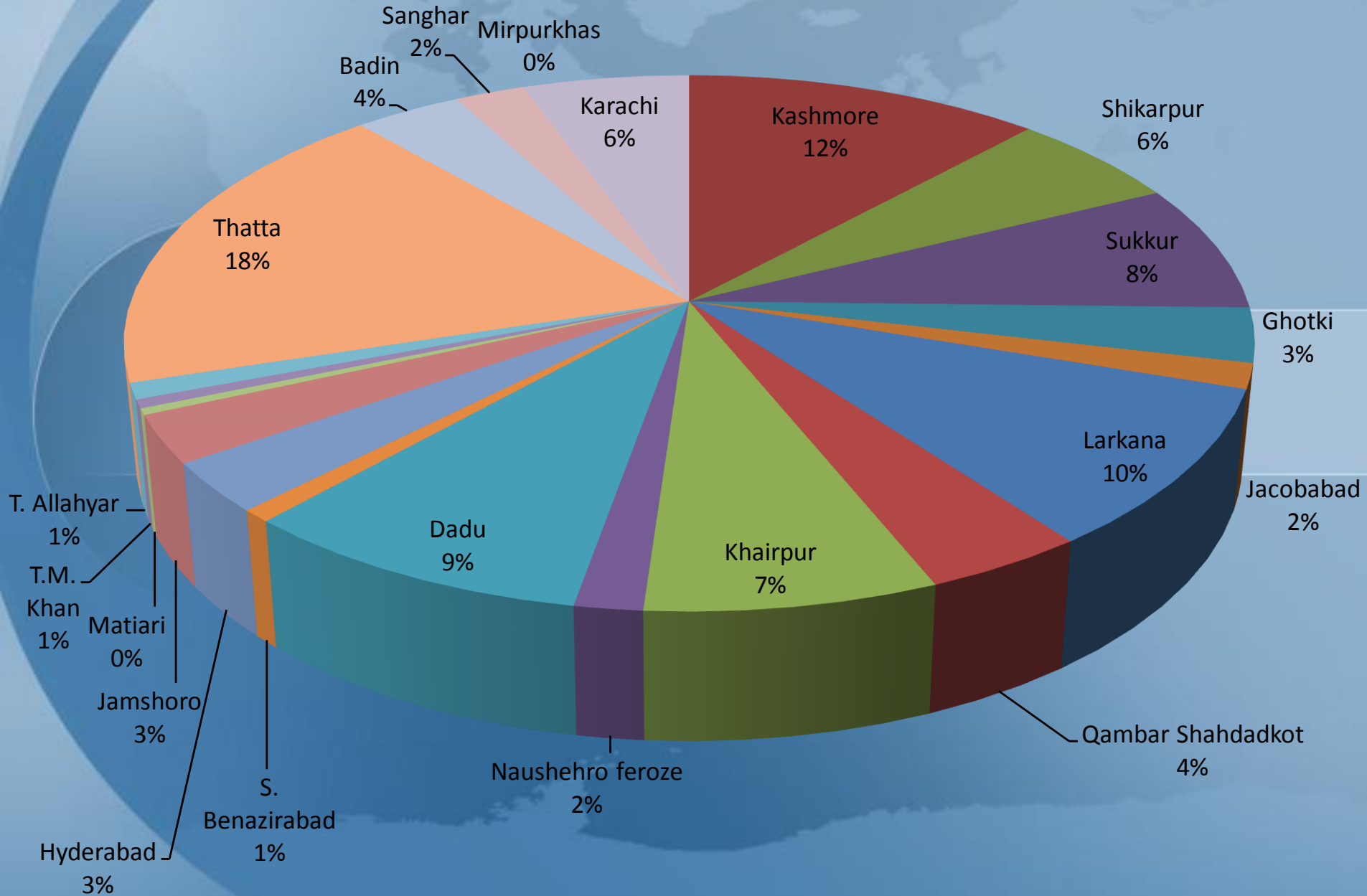
DAMAGES CAUSED DUE TO RAIN/FLOOD-2010

District	Village Affected	Persons Affected	Area Affected (in acres)	Crop Area Affcted (in acres)	Houses Damages	Cattle head	Relief Camps Estab:	Persons in R-Camps
Dadu	1,253	980,000	560,630	223,816	148,485	1,842	432	123,000
S. Benazirabad	82	78,000	98,461	57,170	11,818	R.A	60	10,418
Hyderabad	35	90,500	25,028	R.A	13,712	R.A	75	41,842
Jamshoro	130	250,000	3,830	9,850	37,879	197	94	40,011
Matiari	31	45,600	89,140	63,500	6,909	26	47	5,317
T.M. Khan	79	36,578	64,221	20,160	5,542	16	44	7,225
T. Allahyar					-		162	
Thatta	977	895,400	2,345,600	177,800	135,667	U.S	340	254,868
Badin					-		195	49,519
Sanghar					-		208	32,178
TOTAL	7,507	7,087,391	7,238,372	2,578,129	1,073,847	263,589	3,551	1,386,886

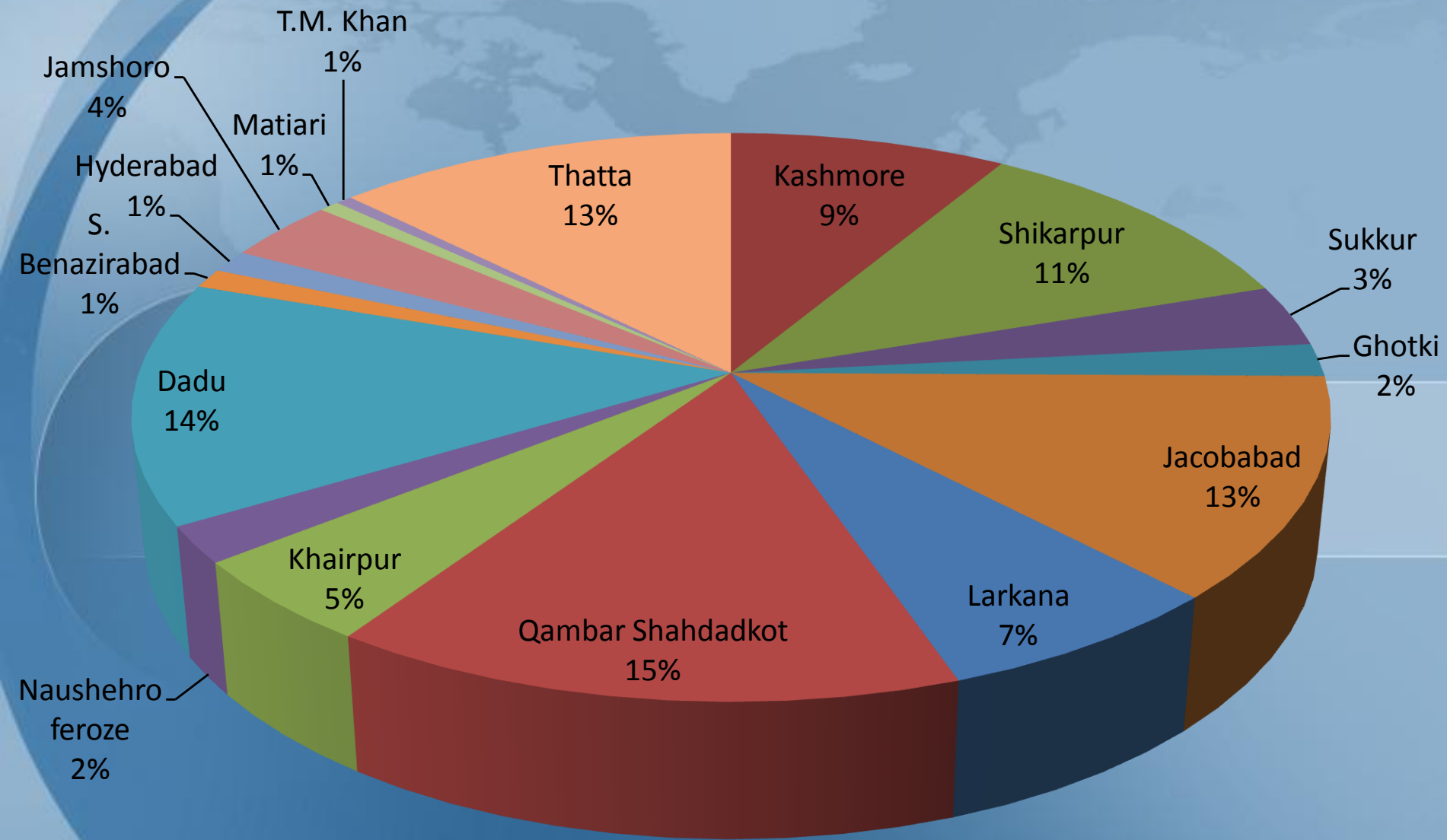
INITIAL DAMAGE ASSESSMENT

- ❑ Socio-economic infrastructure in **6 -7 Districts severely affected**
- ❑ **1.386 m** affected persons are housed in **3551 Relief Camps**. The numbers are increasing due to Thatta and Dadu protective bund breaches;
- ❑ **7507** villages have been affected, **199** people died.
- ❑ Estimated Damages from floods in Sindh is **Rs 446.80 billions**
 - Agriculture: Rs. 122.1 billions
 - Livestock & Fisheries Rs. 11.4 billions
 - Irrigation Rs. 52 billions
 - Housing Rs. 134 billions
 - Roads & Communication Rs. 37.51 billions
 - Health & Education Rs. 30 billions
 - Municipal / Urban / Govern- Rs. 50 billions
-ance Infrastructure
 - Early Recovery Rs. 9.9 billion

Persons in Relief camps established by Govt



Persons Affected



The background of the slide is a stylized, monochromatic blue globe. The continents are depicted in a darker shade of blue, while the oceans are a lighter blue. A thick, horizontal white band runs across the middle of the globe, serving as a backdrop for the title text.

PDMA- Response Coordination

Pre- Flood

- ☐ Pre-Monsoon and Flood Plan 2010
- ☐ Coordination with I&P and All 23 DGs/DDMAs by End of May
- ☐ Coordination with HQ V Corps in June
- ☐ Coordination with NDMA in June
- ☐ Revision of District Plans
- ☐ Coord with Home, Health, LG, Agriculture, Fish. & Livestock etc

Pre- Flood

- ❑ Pre-Disaster Coord with UN agencies
- ❑ Coord with Navy for Placement of SAR Teams
- ❑ Coord with Air Force for Logistics support
- ❑ Creation of Disaster Management head in all DG Budgets
- ❑ Establishment of Provincial & District Control Rooms

During Flood

□ Rescue

- Alerts & Warnings on the basis of Inputs from Pak-Met, Flood Forecasting Centre, I&P & Pak Army
- Coord with Army, Navy and DGs for rescue through Helis/ Boats
- Coord with Pak Railways & others for Evacuation

Contribution of Armed Forces

- ❑ **Pakistan Army**: Pak Army had mobilized 11 Helicopters, 243 boats, and 3 Aircrafts. It has rescued 1,00,372 persons, established 3 medical camps (25000 person treated), provided cooked food to about 20,000 persons, air-dropped 60 tons of food stuff and 292 food packets delivered by road.
- ❑ **Pakistan Air Force**: 3 Helicopters, 11 Boats along with 15 Air Force Commandoes, 25 healthcare professionals, 85 Sorties of C-130s, and almost 5000 flood-affected persons were evacuated by PAF.

Contribution of Armed Forces

- ❑ **Pakistan Navy**: In North Sindh, Pak Navy had coordinated rescue operations with 4 Helicopters, 84 Zulu Boats, 500 Rescue /Logistic Staff, 02 Fokker Air Craft for Logistic Supply, and 03 Hover Crafts.
- ❑ Pakistan Navy rescued 110,000 people, dropped 130 Tons Food etc through Heli/Hover and established Medical Camps in Khairpur, Sukkur, Nawabshah, Kashmore and treated estimated 10,000 Patients;

Relief & Logistics

- ❑ Supply of commodities to and coord with Army & Navy for Air drop
- ❑ Coord with Air force for logistics support to Karachi, Sukkur, Shaheed Benazirabad, Larkana and Jacobabad-PDMA Unit at Sukkur Air Base
- ❑ Coord with CAA & PIA for Handling of Foreign supplies through Jinnah Int-PDMA Unit at Jint.

Relief & Logistics

- ☐ Procurement of Tents and other Essentials for supply through Air/ Land routes
- ☐ Clearance of All relief Supplies through Airport, Sea Port
- ☐ Coord with NDMA, MOFA, Foreign missions, Donors, NGOs for clearance/ logistics/ supply of goods
- ☐ Coord with DGs for articulation of Demand/Supply

Relief & Logistics

- ❑ Coordinating UN response from Joint PDMA-UN Hubs at Sukkur & Hyderabad, through Clusters
- ❑ PDMA ER Coordinators at Thatta and Dadu
- ❑ Coord with concerned Provincial Depts

Relief goods dispatched till 08-09-2010

Name of item	Quantity
Tents	20333
Food Items	400 Tons
Medicines	50 Tons
Non Food Items	110000 units
Blankets	13090 pieces
Heli drops	Approx 200 heli droppings
Boats	10
Boat Engines	14

Expenditure Incurred

- ☐ Funds released by Government of Sindh Rs.130 Million
- ☐ Expenditure incurred to date Rs.180 Million
- ☐ Major heads: Tents, Ration Bags, Boat Engines, Transportation
- ☐ Supply Capability Coming to Halt due to Non-availability of Funds
- ☐ At least Rs 100 M are urgently required

Post-Disaster

- ❑ Registration of and Compensation to IDPs/ affected families through NADRA
- ❑ Identification of un-identified dead bodies through joint NCMC-PDMA Cell
- ❑ ERP with UN/ UNDP concentrating on Next Six Months
- ❑ DNA Exercise with WB/ ADB and P&D
- ❑ PDMA-UN-Army Portal and Help Line for Coordinating Post- Relief Phases

Thanks

