

## HIGHLIGHTS

**AGRICULTURE ALERT:** Less than one week remains to procure wheat seed to deliver in time to flood-affected farmers. Donor funds received in the next few days can still help many families that otherwise would be unable to harvest wheat again until March 2013.

- **Over 3 million flood-affected, food-insecure people in Government notified districts urgently need agricultural support:** one out of three have been struck by floods both this and last year.
- **Planting wheat at the start of December is still possible in many areas** – around 2/3 of flood water has receded across affected districts, and in many areas land preparation is already underway.
- **Stocks of quality wheat seed varieties** suitable for both Balochistan and Sindh are available in-country in sufficient quantities to supply 300 000 households with a 50 kg package per farming family.
- **Further agricultural losses can be prevented with timely donor support.** Prioritized FAO interventions:
  - ❖ **ensure planting where conditions permit** through provision of wheat, sunflower and vegetable seeds and fertilizer, and repair of vital irrigation infrastructure through cash-for-work schemes.
  - ❖ **keep surviving livestock alive, productive and healthy** by distributing life-saving animal feed rations, fodder seed and veterinary supplies.
- **FAO has received USD 1.35 million in funding** under the Pakistan Floods Rapid Response Plan 2011. Contributions have been received from CERF and the Governments of Belgium and Sweden.

## BACKGROUND

- **Heavy monsoon rains** beginning in mid-August have led to severe flooding in Sindh and Balochistan provinces of southern Pakistan. Sindh has been hardest hit, suffering the majority of losses/damage across all districts.
- **Pakistan Floods Rapid Response Plan 2011:** launched 18 September to meet immediate needs in the food security, WASH, health and shelter sectors. FAO co-leads the Food Security Cluster with WFP.
- **FAO has appealed for USD 18.9 million**, within the Response Plan, to provide time-critical support to save, protect and restore agricultural livelihoods (total Food Security Cluster requirements: USD 174 million).

### Flood damage/losses

- **Affected population:** 5.1 million (Sindh, Balochistan)
- **Standing crops:** 0.88 million ha damaged/destroyed – e.g. cotton, rice, sugarcane, sorghum, pulses, vegetables (Sindh)
- **Livestock:** 116 000 dead; 5 million directly affected; 33% killed/sold (Sindh)
- **Irrigation:** 20 400 structures submerged (Sindh)

*Sources: PDMA, Departments of Agriculture and Livestock Extension (Sindh, Balochistan), MSNA*

## CHALLENGES FACING AGRICULTURE

- ❖ **More than 3 million flood-affected and food-insecure people (352 000 families) urgently require agricultural support to resume farming activities – their main source of food and income.**
  - Around 1.05 million were affected by floods in both 2010 and 2011, particularly in Balochistan.
- ❖ **Standing crops, stored seed/grain and productive assets have been lost, leaving the population food insecure and unable to resume crop production.**
  - Destruction of crops including rice (54% loss), cotton (77% loss), fruit/vegetables (84% loss) and production inputs has wiped out farmers' present and future sources of food and income. Damage to irrigation is a concern as 80 percent of wheat planted in Sindh is irrigated.
- ❖ **Meeting planting deadlines is critical to recovery and cannot be underestimated.**
  - **Rabi:** Smallholder farmers urgently require wheat seed for Rabi (winter) planting, beginning early December 2011. Seeds must be procured within a few days to reach farmers in time. Every day delayed after the optimum planting date results in a loss of 16 kg of wheat, per acre, per day (equivalent to a yield reduction of 1 percent per day).

- **Zaid Rabi:** Farmers will also need agricultural inputs to cultivate *Zaid Rabi* crops – such as pulses, sunflower and vegetables – if wheat planting is not possible.

❖ **Surviving livestock are stranded, facing parasite infestation, disease and feed shortages.**

- Livestock, predominantly managed by women, provide a vital source of meat, milk, income and draught/tillage power, and often represent a family's entire life savings. Surviving livestock are at heightened risk of disease and parasite infestation, and without feed due to flooded pastures and destroyed feed/fodder stocks.

❖ **Lack of immediate assistance will trigger further losses and longer-term suffering.**

- Delayed action will lead to worsening food security, increased public health threats, loss of land tenure agreements due to farmers' inability to pay debts contracted during spring planting for the 2011 *Kharif* crops, extended population displacement and longer-term dependence on external food assistance.

❖ **Recurrent floods demonstrate the need for consistent levels of funding for disaster mitigation activities.**

## FAO PRIORITY INTERVENTIONS: USD 18.9 million

**FAO can prevent further livestock deaths and missed planting opportunities** with timely donor support, saving families from a domino effect of continued losses. FAO seeks USD 18.9 million, out of overall Food Security Cluster funding requirements of nearly USD 174 million appealed for in the Pakistan Floods Rapid Response Plan 2011.

**Urgent funding is needed to assist 307 200 families (over 2.6 million people) by:**

1. **Allowing for the immediate resumption of agricultural production once conditions (particularly water recession) allow:** distribution of critical agriculture packages for the 2011 *Rabi* and *Zaid Rabi* seasons (wheat, sunflower and vegetable seeds, plus fertilizer), where planting is possible; de-silting and rehabilitation of irrigation schemes/on-farm drainage systems through cash-for-work schemes.
2. **Preventing further livestock losses:** provision of emergency animal feed rations, fodder seed, vaccination and de-worming supplies.

| Emergency assistance to support agriculture-based livelihoods of vulnerable flood-affected households in Sindh |  |                |          |
|--|--|----------------|----------|
| OCHA code  | Objective  | Funding        |          |
|  |  | Requested      | Received |
| PAK-FL-11/A/43136/123  | To provide immediate livelihoods support to ensure livestock survival and immediate resumption of agricultural activities. | USD 18 900 000 | 7.1%     |

## MOVING FORWARD AND BUILDING ON PAST EXPERIENCE

**FAO's 2010 flood response** reached 7 million people (900 000 families) with winter and spring planting inputs, livestock support and irrigation repair.

**Preparedness:** worked with government/sectoral partners to develop contingency plans; completed a post-flood Detailed Livelihoods Assessment in 28 districts; flood modeling and mapping in collaboration with Pakistan Space and Upper Atmosphere Research Commission; preparation of district level Hazard, Livelihood and Vulnerability Baseline and Contingency Plans.

**Presence:** FAO has strengthened its presence and partnerships in Pakistan, with a national office in Islamabad and provincial coordination offices in Peshawar (Khyber Pakhtunkhwa), Multan (Punjab), Hyderabad (southern Sindh) and Sukkur (northern Sindh), with presence in Quetta (Balochistan).



2010 Floods Response

## CONTACT

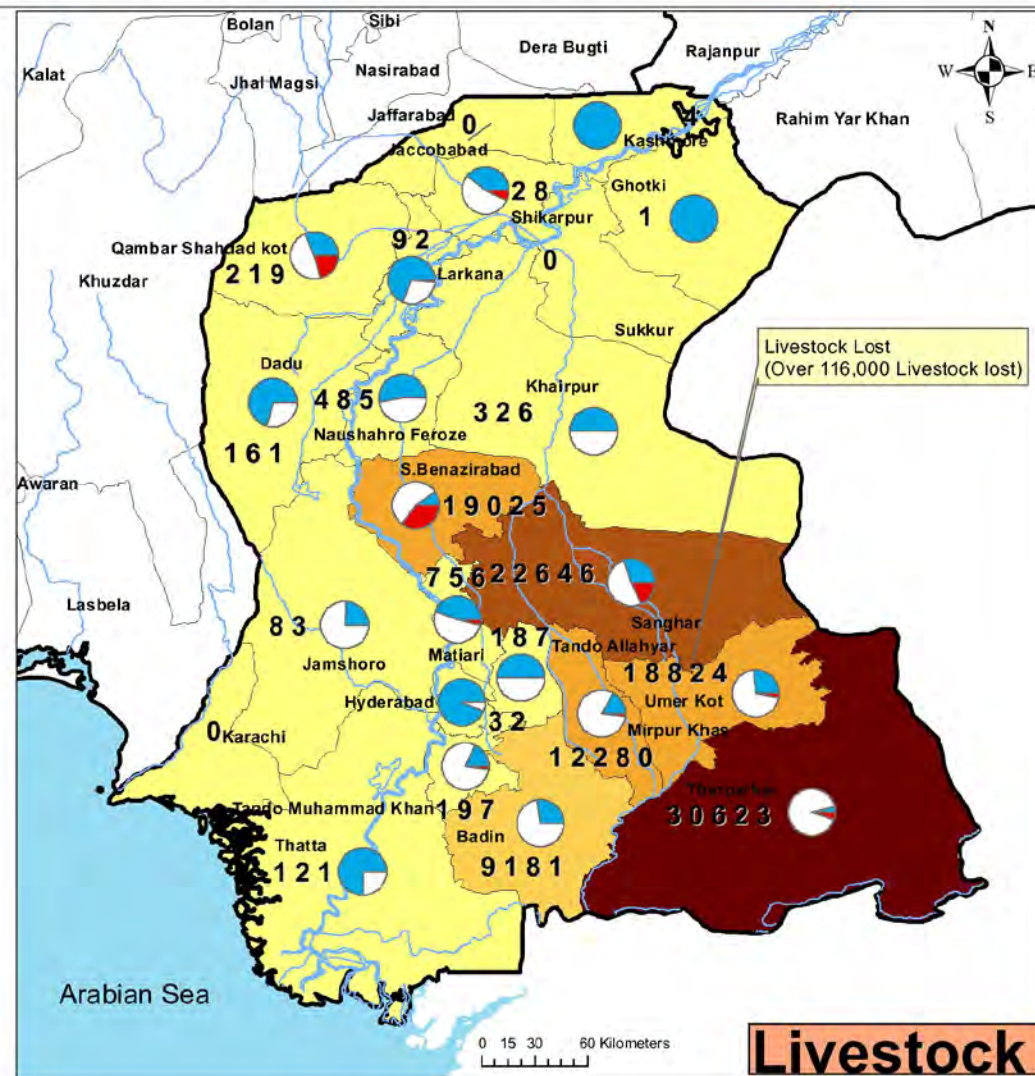
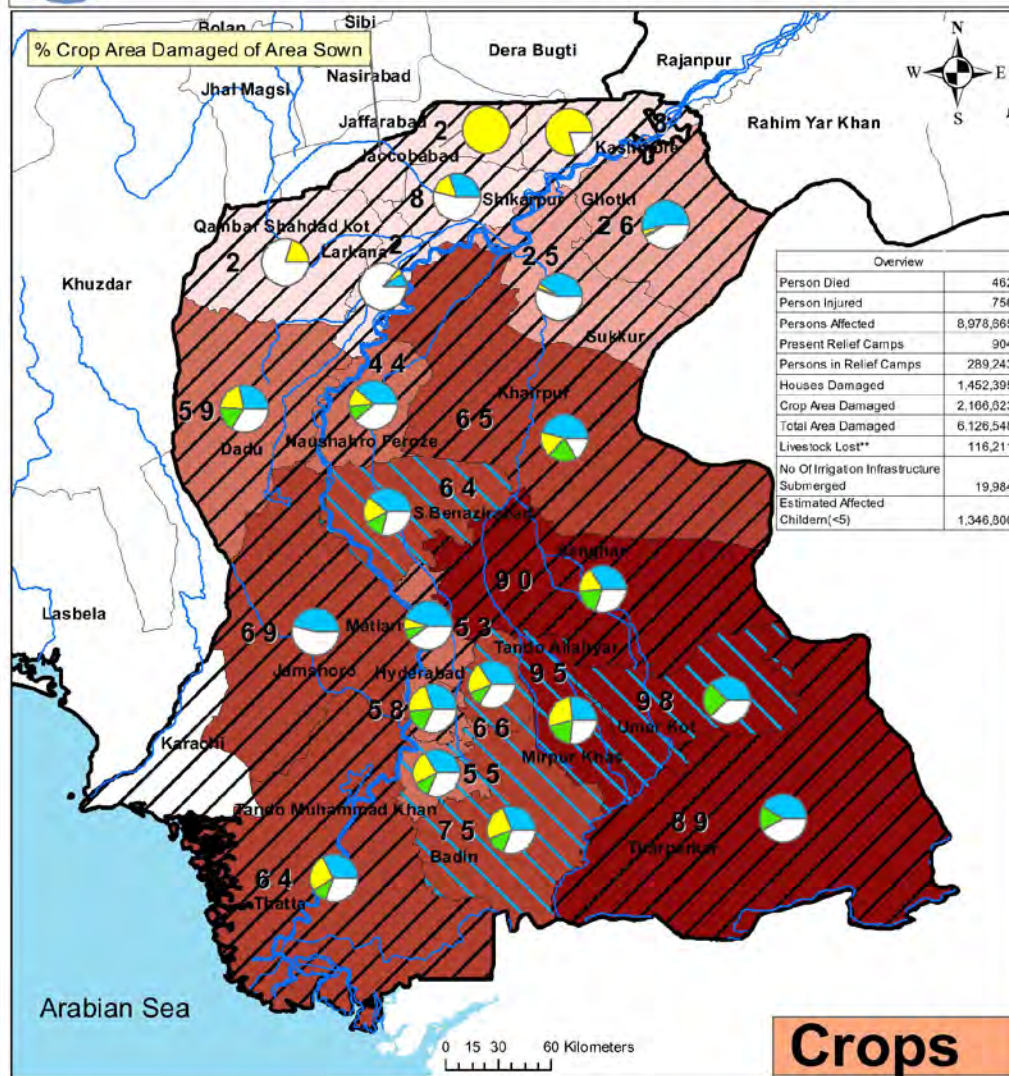
**Daniele Donati**

Chief - Emergency Operations Service  
Emergency Operations and Rehabilitation Division  
Viale delle Terme di Caracalla; Rome 00153, Italy  
Tel.: +39 06 570 53032  
Email: [Daniele.Donati@fao.org](mailto:Daniele.Donati@fao.org)





# Pakistan - Flood / Rain 2011 - Sindh 27th October 2011



## Legend

- Rivers
- Provincial boundary
- District boundary
- Arabian Sea

### % Crop Area Damaged of Area Sown

- 0 - 20 %
- 20.1 - 40 %
- 40.1 - 60 %
- 60.1 - 80 %
- > 80 %

### Severity

- Severe
- Moderate

### Crop wise damages (Acres)



- Cotton
- Rice
- Sugarcane
- Other

### Livestock Lost

- 0 - 1000
- 1001 - 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- > 30,000



- Large Animals
- Small Animals
- Others

Severity: % of affected population greater than 40 %  
And % of Crop area damaged of area sown is greater than 50 %



**Data Sources**  
Administrative boundaries: GAUL  
Data: DG Agriculture, PDMA  
Dated: 27th October 2011  
Code: FAOPK1036\_Pakistan\_Floods2011  
\_Sindh\_Map\_v24\_20111027

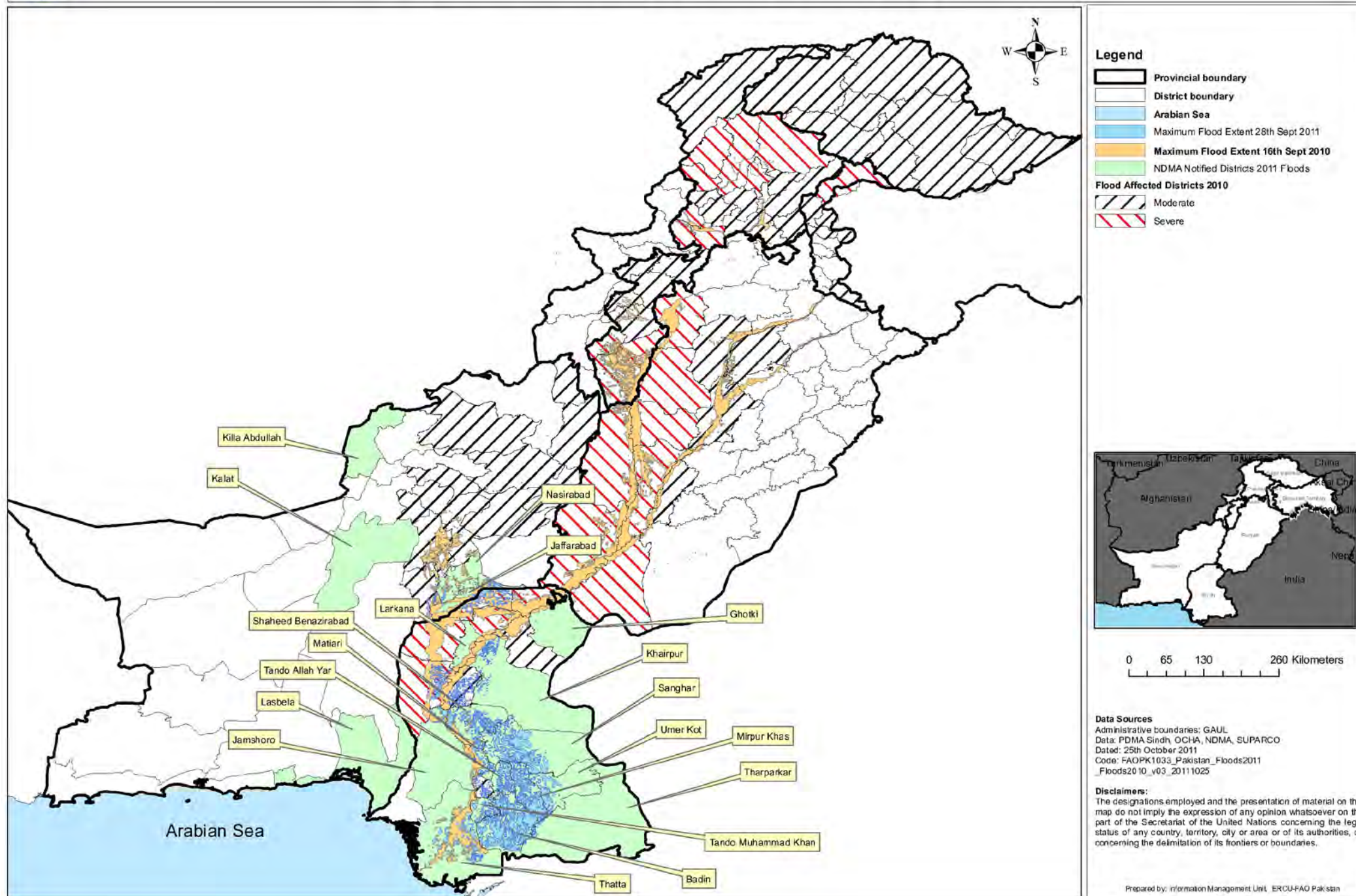
**Disclaimers:**  
The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Prepared by: Information Management Unit,  
ERC-UN/FAO Pakistan





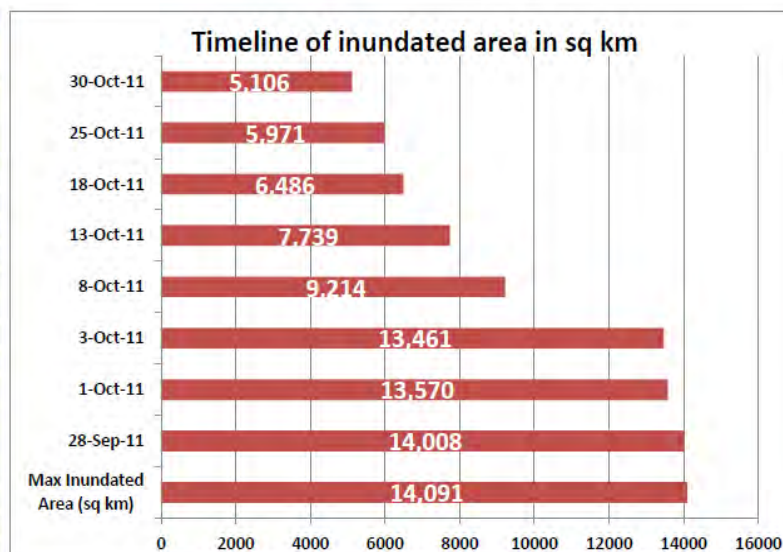
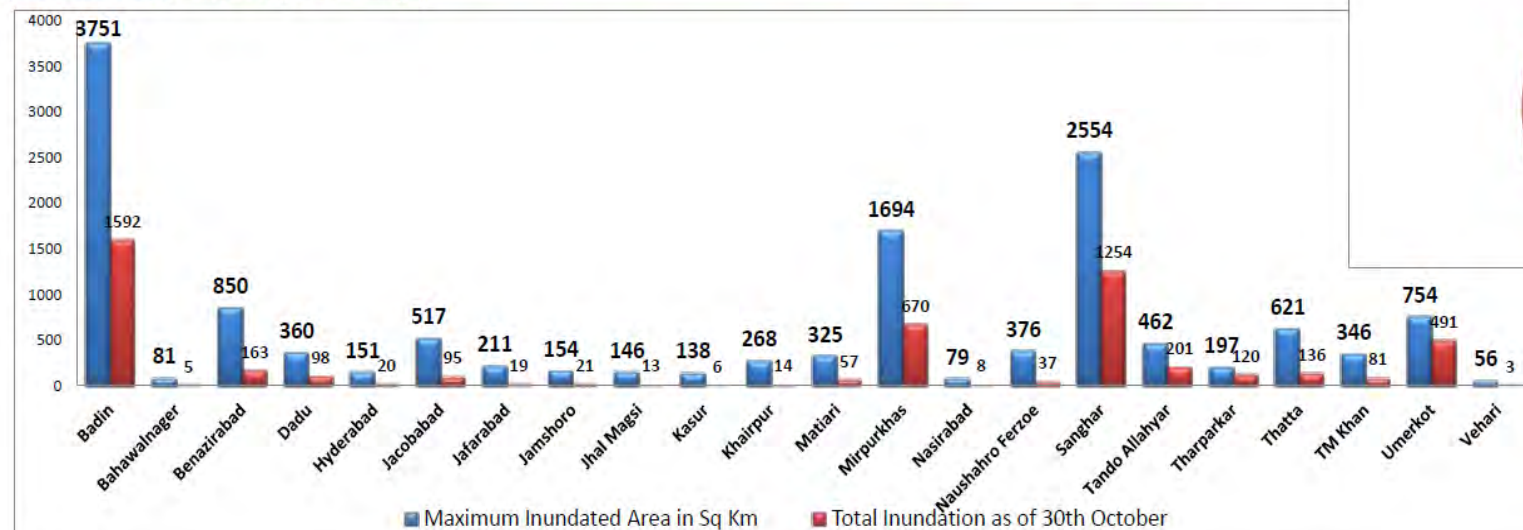
# Pakistan - Flood 2010 versus Floods 2011





| Inundated Area (Sq Km) |                            |               |               |               |              |              |              |              |              |
|------------------------|----------------------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
| District               | Max Inundated Area (sq km) | 28-Sep-11     | 1-Oct-11      | 3-Oct-11      | 8-Oct-11     | 13-Oct-11    | 18-Oct-11    | 25-Oct-11    | 30-Oct-11    |
| Badin                  | 3751                       | 3687          | 3644          | 3632          | 2645         | 2359         | 1930         | 1767         | 1592         |
| Bahawalnager           | 81                         | 81            | 70            | 62            | 38           | 23           | 14           | 11           | 5            |
| Benazirabad            | 850                        | 827           | 806           | 797           | 417          | 288          | 256          | 232          | 163          |
| Dadu                   | 360                        | 360           | 289           | 279           | 186          | 175          | 140          | 107          | 98           |
| Hyderabad              | 151                        | 151           | 137           | 137           | 34           | 22           | 22           | 22           | 20           |
| Jacobabad              | 517                        | 517           | 492           | 490           | 235          | 169          | 114          | 103          | 95           |
| Jafarabad              | 211                        | 211           | 190           | 185           | 124          | 80           | 64           | 41           | 19           |
| Jamshoro               | 154                        | 154           | 110           | 101           | 68           | 54           | 33           | 29           | 21           |
| Jhal Magsi             | 146                        | 146           | 135           | 130           | 88           | 59           | 47           | 31           | 13           |
| Kasur                  | 138                        | 138           | 133           | 122           | 55           | 42           | 29           | 17           | 6            |
| Khairpur               | 268                        | 268           | 260           | 258           | 29           | 18           | 17           | 16           | 14           |
| Matari                 | 325                        | 325           | 315           | 314           | 116          | 79           | 75           | 71           | 57           |
| Mirpurkhas             | 1694                       | 1685          | 1674          | 1668          | 1288         | 1079         | 867          | 785          | 670          |
| Nasirabad              | 79                         | 79            | 75            | 68            | 41           | 28           | 21           | 15           | 8            |
| Naushahro Ferzoe       | 376                        | 376           | 365           | 362           | 110          | 69           | 50           | 47           | 37           |
| Sanghar                | 2554                       | 2550          | 2450          | 2442          | 2081         | 1726         | 1543         | 1458         | 1254         |
| Tando Allahyar         | 462                        | 450           | 448           | 446           | 264          | 234          | 223          | 219          | 201          |
| Tharparkar             | 197                        | 197           | 202           | 201           | 126          | 178          | 157          | 145          | 120          |
| Thatta                 | 621                        | 650           | 606           | 606           | 393          | 275          | 214          | 206          | 136          |
| TM Khan                | 346                        | 340           | 336           | 333           | 179          | 131          | 96           | 84           | 81           |
| Umerkot                | 754                        | 760           | 784           | 784           | 674          | 637          | 566          | 561          | 491          |
| Vehari                 | 56                         | 56            | 49            | 44            | 23           | 14           | 8            | 4            | 3            |
| <b>Total</b>           | <b>14,091</b>              | <b>14,008</b> | <b>13,570</b> | <b>13,461</b> | <b>9,214</b> | <b>7,739</b> | <b>6,486</b> | <b>5,971</b> | <b>5,106</b> |

\* Data Provided by SUPARCO through Satellite Imagery



Receded vs Inundated area as of 30th October 2011

