Crisis of Floods and Mines
IRAQ 2013

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1. Introduction

2. Landmines History in Wassit and Missan Provinces

3. Floods in Wassit and Missan Provinces

4. Crisis Management

5. Role of UN-Spider Program

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1. Introduction

• Large areas of the Iraqi lands are suffering from dryness and desertification which lead to the immigration of farmers from the countryside to the city.

• None left but the villages on the banks on the main rivers.

• This phenomena resulted in widening the dust storms in the last four years.
2. Landmines History in Wassit and Missan Provinces

- In addition, Iraq is one of the most greatly affected country with the landmines and unexploded ordnance left by previous wars.
  1. The 1980 - 1988 war with Iran.
  2. The 1991 first Gulf war.
  3. The 2003 second Gulf war.
- Iraq planted millions of landmines throughout the borders with neighboring countries, Kuwait and Iran.
- The landmine danger still threaten 1.6 million persons for an area of 1730 Km² according to the landmine Impact survey results, which was conducted in 2004 – 2006.
2. Landmines History in Wassit and Missan Provinces

• Also Iraq was bombed with about 50 million cluster bombs.
• It is well known that 30% of them did not explode which leaves about 16 million dangerous cluster bombs.
• Iraq has extensive unexploded ordnance UXO from the past wars.
2. Landmines History in Wassit and Missan Provinces

- Among the provinces affected by this danger that have been mentioned are: Wassit & Missan had the flood and torrent in May of this current year.
As the victims of mines, based on the survey of 2012, were as follows:

- **Wassit province**: about 4000 Victims.
- **Missan province**: about 5800 Victims.
3. Floods in Wassit and Missan Provinces

- On 3-6 May 2013 these two provinces, which are located in the east of Iraq in the border areas with neighboring Iran had very heavy rains.
- In addition to exposure to flood coming from the Iranian side of the high land there. Led to the sinking of the many villages and 90% damage for crops there.
- Here begins the risk of flooding in addition to mine drift towards populated areas.
4. Crisis Management

**Actions taken**
- Spreading mine risk education teams in both provinces.
- Using the media to send messages to the areas where the mines and unexploded ordnance are expected to reach for warning not to approach strange objects and informing about them.
4. Crisis Management

- Producing of maps illustrating landmines locations data and distribute them to every body working in the rescuing field.
4. Crisis Management
4. Crisis Management

- Deploying 10 field teams to surround populated areas and ensure non-driftage.
4. Crisis Management

- Checking the landmine fields and ensure the scatter of mines there.
4. Crisis Management

- Contacting UN-SPIDER to provide us with flood satellite imagery.
4. Crisis Management

- The satellite imagery were distributed after adding the existing landmines in the provinces layer to follow up the residents rescue works, providing aid and setting up tents.
4. Crisis Management

- Using media to reassure the citizens and informing them that the danger of landmine did not reach populated areas.
- Visiting the border areas and making sure there are no dangerous driftage.
5. Role of UN-Spider Program
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Floating Monitoring
Based on HJ-1 & IRS-R2
(Mission for Iraq)

Location

Disaster Information

- A flood monitoring area in Iraq on May 3, 2013. The flood occurred in Misan province, located in the east of Iraq.

Results

- Based on the change detection, the water body in the flooding area has been tested. According to the images, the flooding area of the downstream dam reached about 70 square kilometers on May 7, 2013. The agricultural fields were affected by the flood. The villages and the traffic lines were not affected significantly.

Legend

- Water Body in Jun, 2013
- Water Body in May, 2013
- Flooded Area
- River
- Lake
- Rice Field
- Village
- Village
- Traffic Line
- Dam
5. Role of UN-Spider Program

Flooding Monitoring Based on HJ-1 & IRS-R2 (Mission for Iraq)

Location

Disaster information
A flood following a dam break in Iraq on May 3, 2013. The flood occurred in Missan province, located in the east of Iraq.

Results
Based on the change-detection for water body, the flooding area has been extracted. According to the imagery, the dam was lack of water during the April in the last year. By May 7, 2013, the water body area rises to about 770 square kilometers, which is almost 7.7 times of that in the last April. The agriculture field was affected by the flood. The villages and the traffic lines were not affected significantly.

Legend
Water Body (in Apr,2013)
Water Body (in May,2013)

The Office of China National Committee for Disaster Reduction
National Disaster Reduction Center of China, MCA
UNOSAT/SPIDER, Beijing
Mapping Time: May 9, 2013
5. Role of UN-Spider Program

Flooding Monitoring Based on VIIRS (Mission for Iraq)

- Location
- Disaster Information: A flood in Iraq on May 3, 2013. The flood occurred in Missan province, located in the east of Iraq.
- Results: Based on the change detection for water body, the flooding area has been extracted. According to the imagery, the flooding area reached about 10,264 square kilometers on May 3, 2013, which is more than 50% of the area. The flooding area affected by the flood. These areas were not affected significantly.

Legend:
- Water Body (in May, 2013)
- Water Body (in May, 2012)

Map provided by: UN-oesaidy/UNOSAT DRR/GLO"
Some drifts in the border areas have been controlled and put warning signs and the team will conduct a survey of all land affected by flooding.
6. Movie about the Crisis management