



## Afghanistan GIS Day 2015

### Workshop Proceedings

# GIS-Workshop and Mapping Afghanistan Competition on International GIS Day 2015

18 November 2015

## Workshop Proceedings





## SUMMARY:

<b>EVENT TITLE</b>	GIS-Workshop for Afghanistan & Mapping Afghanistan 2015 Competition on International GIS Day
<b>ORGANIZER</b>	UNEP, NEPA, and Kabul University
<b>VENUE</b>	Kabul University, Faculty of Environmental Science
<b>DATE</b>	18 November 2015
<b>MAIN AUDIENCE</b>	Government, Academia, INGOs, UN agencies and Private Sector
<b># OF PARTICIPANTS</b>	72
<b>KEY WORDS</b>	GIS, Remote Sensing, GIS-User-Community, Data Platform, Training

## INTRODUCTION:

This workshop on International GIS Day was held at Kabul University and was organized by the United Nations Environment Programme (UNEP), the National Environmental Protection Agency (NEPA), Kabul University, and Kabul Polytechnic University. This event aimed to bring loose ends together, identify synergies, provide stakeholders with a platform, prepare the ground for fruitful collaborations, and re-establish the GIS User Community in Afghanistan that has been inactive since 2012. These needs are especially valuable in a developing/post-conflict country such as Afghanistan where the bandwidth of potential GIS applications is multifaceted: from mine clearing to ecological conservation, from disaster risk reduction to road construction. Nevertheless, the exchange between user groups is often poor and the application of GIS in Afghan administration limited.

This re-establishment of the GIS community of Afghanistan is also based on the outcome of the conference on GIS in the hydrological context, organized by the Ministry of Rural Rehabilitation and Development (MRRD) and NORPLAN from 10-11 November 2015. Its focus was on the current state of GIS dissemination in Afghanistan and provided an overview on current usage of GIS in academia, Government, INGOs, and the Private Sector of Afghanistan. As a side event to the GIS Workshop, an exhibition titled "Mapping Afghanistan 2015" displayed maps created by students as part of a competition for World GIS Day. This was part of an initiative to foster greater youth involvement in geospatial analysis and mapping in Afghanistan.

Key stakeholder representatives from the Government, civil society, and the United Nations that attended this workshop include:

- National Environmental Protection Agency (NEPA)
- Ministry of Energy and Water (MEW)
- Ministry of Rural Rehabilitation and Development (MRRD)
- Ministry of Agriculture and Irrigation (MAIL)
- Ministry of Mines and Petroleum (MoMP)
- Kabul University
- Polytechnical University of Kabul
- United Nations Environment Programme (UNEP)
- UN Office for the Coordination of Humanitarian Affairs (OCHA)
- United Nations Human Settlements Programme (UNHABITAT)
- Food and Agriculture Organization (FAO)

- United Nations Development Programme (UNDP)
- World Food Programme (WFP)
- Afghanistan Information Management Services (AIMS)
- Wildlife Conservation Society (WCS)
- NORPLAN
- Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Norwegian Afghanistan Committee (NAC)
- Aga Khan Foundation (AKF)
- Danish Committee for Aid to Afghan Refugees (DACAAR)
- Liwal LTD

**KEY OUTCOMES:**

1. A re-establishment of an active GIS-User-Community was discussed during the workshop, and AIMS volunteered to facilitate a monthly meeting. Participants will be invited according to a GIS contact list based on existing contacts and participants of the workshop. AIMS proposed and volunteered to set up a webpage with basic information's on GIS in Afghanistan and main contacts and links. Eventually the facilitation of the GIS-User-Community shall be handed over to an appropriate governmental body, e.g. the planned GIS department of the Ministry of Communications and Information Technology (MCIT) or Afghan Geodesy and Cartography Head Office (AGCHO).
2. During the GIS conference at MRRD from 10-11 November 2015, participants identified a strong need for a GIS data-sharing platform. At the GIS-workshop at Kabul University, the participants discussed about the structure of the needed platform and agreed of the concept displayed in Figure 1, below.
3. The attending students as well as governmental bodies expressed a strong need for increased and improved GIS training options in Afghanistan. During a discussion on specific training needs suggestions offered included:
  - a. All trainings for students and governmental bodies should at least include a practical component (work-station for each participant in a GIS-Lab)
  - b. Data collection/management should be part of the trainings
  - c. There should be a central platform where all training offers are listed
  - d. The organizations providing trainings should exchange their experience and coordinate their trainings



*Figure 1 Proposed structure of a geospatial data-sharing platform for Afghanistan.*



## PRESENTATIONS AND DISCUSSIONS:

### 1.1. Opening remarks were provided by:

- 1.1.1. The Dean of the Environmental Faculty of Kabul University, Professor Noor Ahmad Akhundzadah, Kabul University, who welcomed the participants at the University and pointed out the importance of GIS for the development of Afghanistan.
- 1.1.2. UNEP Afghanistan Programme Manager, Mr. Andrew Scanlon, who welcomed all to the event and expressed his appreciation that all most GIS Users from government, academia, UN, INGOs, and private sector attended the workshop.

### 1.2. The following presentations on GIS in governmental bodies in Afghanistan: usage, gaps and strategies were delivered:

- 1.2.1. Message from the GIS conference held at MRRD 10-11 November: Prof. Naim Eqrar reported the results of the conference and underlined the need for a GIS-User-Community in Afghanistan.

### 1.3. Session for governmental GIS-Users:

- 1.3.1. MRRD: Ahmad Shekeb presented on GIS usage/strategy/needs in MRRD
- 1.3.2. MAIL: Noorullah Stanikzai presented on GIS usage/strategy/needs in MAIL
- 1.3.3. NEPA: Eng. Abdul Mateen Salek presented on GIS usage/strategy/needs in NEPA

### 1.4. Session for University GIS curriculums

- 1.4.1. University of Kabul: Prof. Shuaib Zarinkhail presented on GIS curriculum and future strategy/needs of Kabul University
- 1.4.2. Polytechnical University of Kabul: Prof. Zaher Sultani presented on GIS curriculum and future strategy/needs of Polytechnical University of Kabul

### 1.5. Session on GIS applications and usage in Afghanistan

- 1.5.1. OCHA: Ramon Shrinkfield presented on GIS in the humanitarian context
- 1.5.2. WSC: Rohullah Sangar and Haqiq Rahmani presented on Conservation GIS in Afghanistan
- 1.5.3. DACAAR: Eng. Mohammad Hassan Saffi presented on Integrated Database Management System and GIS functionality in hydrology

### 1.6. Session on GIS dissemination, data-sharing and trainings

- 1.6.1. IMMAP: Dr. Emlyn Hagen presented on GIS in the Disaster Risk Reduction context
- 1.6.2. AIMS: Ali Ahmad Wali presented on the GIS lifecycle in Afghanistan
- 1.6.3. UNEP: Valentin Aich presented on UNEP data and training initiatives
- 1.6.4. NORPLAN: Prof. Shuaib Zarinkhail presented on GIS trainings and Online GIS trainings

### 1.7. Three working groups discussed the main issues that have been identified during the GIS conference held at MRRD 10-11 November

- 1.7.1. Discussion on geospatial data-sharing and structures of data-platform (Discussion outcome on Figure 1)
- 1.7.2. The participants discussed the facilitation and structure of a GIS-User-Community in Afghanistan. Discussion outcome (protocol):
  - GIS-User Group meeting should be held at AIMS on monthly basis
  - A contact list of all GIS users in Kabul and Afghanistan should be distributed
  - The purpose of the meetings should be clear with one or two presentations
  - Agenda of the meeting should be clear, duration of meeting time and it should be on an official working day
  - On the long term there should be a webpage for the GIS-User community of Afghanistan and linked worldwide GIS users



- On the long term there could be internships for faculty students in ministries or other practitioners and scholarships for students
- 1.7.3. The participants discussed good practice for trainings on GIS in Afghanistan:  
Discussion outcome (protocol):
- Course should be specific:
    - Duration
    - Goals
    - Participants capacities
  - Training must be in Lab
    - Up-to-date data
    - The training material should be from the specific field of study
    - The exercises should be practical in a lab
  - Training in data collection
    - Surveying tools
    - Open source software and data sources
  - Announcement free and chargeable GIS trainings
  - Sharing the experience to other organizations

*1.8. Award Ceremony for Mapping Competition winners*

- 1.8.1. The three winners of the Mapping Competition 2015, Qais Ahmad Aria, Khairudin Rasikh and Suhrabuddin Nasery were awarded by Prof. Shuaib Zarinkhail and Professor Shah Wali Sargand.

*1.9. Closing remarks were provided by:*

- 1.9.1. The Dean of the Geomatic and Cadastre faculty of Polytechnical University of Kabul, Professor Shah Wali Sargand, who thanked the organizers and expressed his hope that the impulse of this conference would last long. In addition, he offered to facilitate the GIS Day next here at his faculty.
- 1.9.2. The Dean of the Environmental Faculty of Kabul University, Professor Noor Ahmad Akhundzadah thanked all participants, especially the presenters. He congratulated to the concrete outcome of the conference and said that the event helped to encourage students in learning GIS.



## Annex 1: Attendance Sheet

#	Name	Organization	Title/Position
1	Shoaib Azizi	UNHABITAT	GIS Head
2	Savein Stoveland	NORPLAN	Team Leader
3	Naqibullah Abrar	NORPLAN	Deputy Team Leader
4	Andrew Scanlon	UNEP	Country Director
5	Prof. Naim Eqrar	KU	Professor
6	Valentin Aich	UNEP	CCAS
7	Ali Wali	AIMS	GIS Manager
8	Taieb	MEW	Water Resource Specialist
9	Mateen Salek	NEPA	GIS Technician
10	Haqiq Rahmani	WCS	GIS Specialist
11	Rohullah Sanger	WCS	GIS Manager
12	Abbas Khoshal	AKF	GIS Specialist
13	Andrea Porro	iMMAP	Senior Information Management Officer
14	Hagen Emlyn	iMMAP	IMO-DRR
15	Mohammad Fayaz Fayaz	GIZ	National Advisor
16	Prof. Shuaib Zarin Khail	KU/CS	Professor
17	Najeeb Kakar	NAC	GIS Officer
18	Prof. Noor Ahmad Akhundzadah	KU	Dean of Environmental Faculty
19	Ahmad Samir Shahin	AGS. MoM	R.S Specialist
20	Farid Ahmad	AGS. MoM	GIS Specialist
21	Ahmad Sharifi	MAIL	GIS Operator
22	Ramon Shrinkfield	OCHA	IMO
23	Prof. M. Zahir Sultani	KPU	Professor
24	Hashmat Omid	UNFAO/IRDP	GIS Technician
25	Fatima Akbary	NEPA	POPS, project
26	Eng. Mohammad Hassan Safi	DACAAR	Hydrologist
27	Prof. Wafaurahman	KU	Professor
28	Prof. Mustafa Hassani	KU	Professor
29	Prof. Elham	KU	Professor
30	Sumam Sigapati	UNFAO	CTA
31	Prof. Pashtana	KU	Professor
32	Mohibullah Sahak	Liwal	GIS Expert
33	Prof. Shah Wali Sargand	KPU	Dean of Geomatics & Cadaster Faculty
34	Prof. Anwar	KPU	Professor
35	Mujeebullah Dastyar	MRRD	GIS Expert
36	Ahmad Shekeb	MRRD	GIS Officer
37	Amannuddin	MRRD	GIS Technician
38	Mohammad Salim Soltani	UNEP	GIS Expert
39	Hamid Jamshid Samadi	UNDP	GIS Expert



40	Hassibullah	KPU	Student
41	Esmatullah	KU	Student
42	Khairoddin	KU	Student
43	M. Ashraf	KPU	Student
44	Qais Ahmad	KPU	Student
45	Wahidullah	KPU	Student
46	S. Nasser Fazly	KU	Student
47	Islammudin Alemy	KPU	Student
48	Mashallah	KPU	Student
49	Hanifullah	KPU	Student
50	Zabihullah Hami	KPU	Student
51	Abdul Ghafoor hussaini	KPU	Student
52	Nesar Ahmad	KPU	Student
53	Nasratullah	KPU	Student
54	M.sharif	KPU	Student
55	Suhrabudin Nasery	KPU	Student
56	Ahmad popal	KPU	Student
57	Omid	KPU	Student
58	Behishta	KU	Student
59	Fatima	KU	Student
60	Shokuria	KU	Student
61	Hamayoun	KU	Student
62	Waheed	KU	Student
63	M. Ali Salehi	KU	Student
64	Musa	KU	Student
65	M.peruze	KU	Student
66	S. Ahmad Ghafor	KU	Student
67	Roya	KU	Student
68	Zuhal	KU	Student
69	Sayeed Hojat	KU	Student
70	Noorodin	KU	Student
71	M.Solaiman	KU	Student
72	Loqman	KU	Student

## Annex 2: Event Agenda

### GIS for Afghanistan Workshop on

# GISday

## 18 November 2015

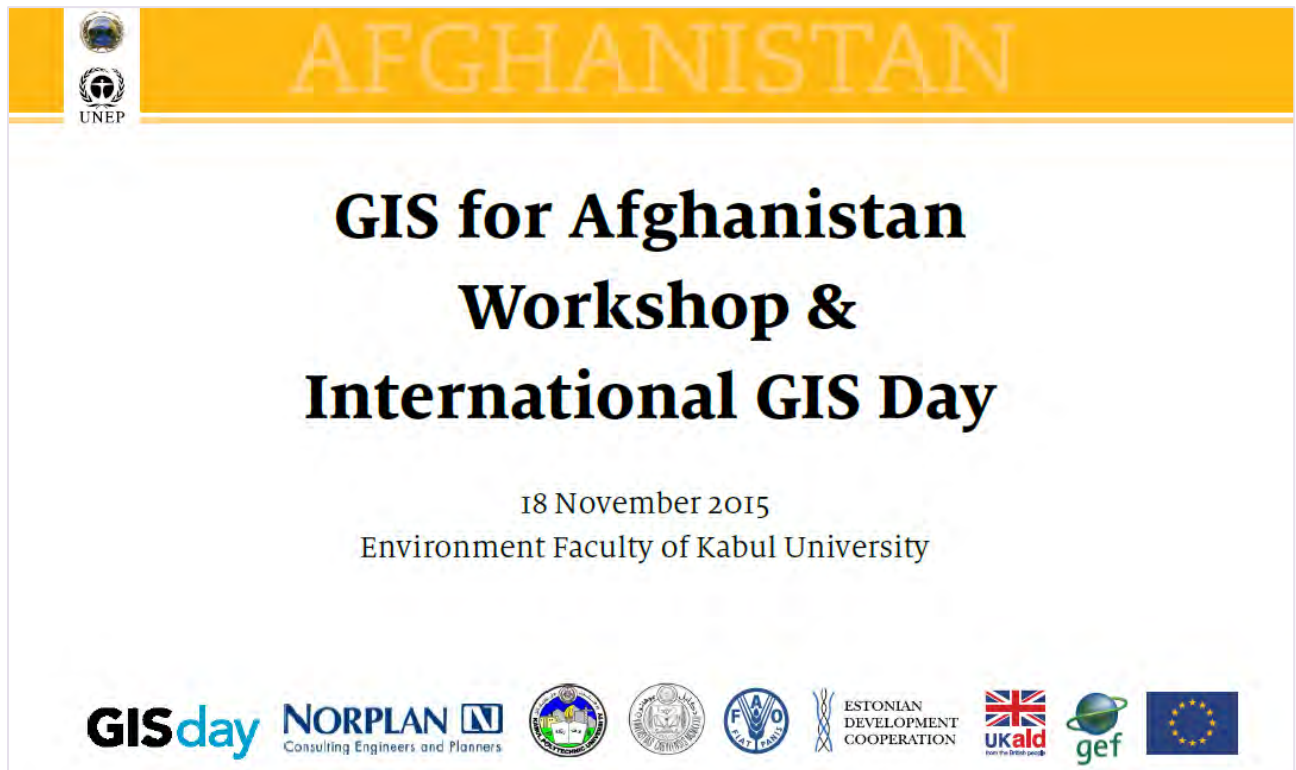
### at the Environmental Faculty of Kabul University

Time	Action	Main actor
08.30 – 08.50	Arrival Registration	
08.50 – 09.00	Welcome remarks	Prof. Noor Ahmad Akhundzadah, Kabul University
09.00 – 09.10	Welcome remarks	Andrew Scanlon, UNEP
09.10 – 09.30	Message and wrap up from the Hydro-GIS conference, held at MRRD from 10 <sup>th</sup> -11 <sup>th</sup> November as input for the re-establishment of the GIS community in Afghanistan.	Prof. Naim Eqrar, Kabul University
09.30 – 10.30	Presentation on the GIS usage/strategy/needs of ministries and governmental agencies	
09.30 – 09.45	GIS usage/strategy/needs in MRRD	Ahmad Shekeb, MRRD
09.45 – 10.00	GIS usage/strategy/needs in MAIL	Noorullah Stanikzai, MAIL
10.00 – 10.15	GIS usage/strategy/needs in NEPA	Eng. Abdul Mateen Salek, NEPA
10.15 – 10.30	GIS usage/strategy/needs in MEW	Mohammad Nasim, MEW
10:30 – 10:45	Launch of GIS Maps Exhibition/ Tea break	
10.45 – 11.15	Presentation on the GIS curriculum and future strategy/needs of Afghan Universities	
10.45 – 11.00	Kabul University & provincial GIS curriculum	Prof. Shuaib Zarinkhail, Kabul University
11.00 – 11.15	Polytechnic University of Kabul GIS curriculum	Prof. Zaher Sultani, Polytechnic University of Kabul
11.15 – 12:00	Selected presentations of GIS community with focus on application/usage	
11.15 – 11:30	GIS in the humanitarian context	Ramon Shrinkfield, OCHA
11.30 – 11:45	Conservation GIS	Rohullah Sangar and Haqiq Rahmani, WCS
11.45 – 12:00	IDMS and GIS functionality	Eng. Mohammad Hassan Saffi, DACAAR
12.00 – 13.00	Lunch	
13.00 – 14.00	Selected presentations of GIS community with focus on dissemination and training	
13.00 – 13.15	GIS in the Disaster Risk Reduction (DRR) context	Dr. Emlyn Hagen, iMMAP
13.15 – 13.30	GIS lifecycle in Afghanistan	Ali Ahmad Wali, AIMS
13.30 – 13.45	UNEP data and training initiatives	Valentin Aich, UNEP
13.45 – 14.00	Trainings and online-GIS trainings	Prof. Shuaib Zarinkhail, NORPLAN
14.00 – 14.30	Working groups on: <ol style="list-style-type: none"> <li>1. Data sharing/data platforms</li> <li>2. Web platform for GIS community/ GIS community email list</li> <li>3. Regular meetings, venue etc.</li> <li>4. Joint strategy for the dissemination/training of GIS</li> </ol>	
14.30 – 15.00	Presentation and wrap up of results of working groups	
15.00 – 15.30	<ul style="list-style-type: none"> <li>• Conclusions</li> <li>• Mapping Afghanistan 2015 Award Ceremony</li> <li>• Casual conclusion of the workshop with tea</li> </ul>	





### Annex 3: Workshop Banner



**Annex 4: Message and Wrap up from the Hydro-GIS Conference (10-11 Nov 2015)**

**Annex 5: What GIS Unit and the Programs are Mainly Doing at MRRD**

**Annex 6: GIS/RS Usage in MAIL**

**Annex 7: NEPA GIS Lab**

**Annex 8: Kabul University & Provincial GIS curriculum**

**Annex 9: OCHA Presentation on GIS in the Humanitarian Context**

**Annex 10: WCS Afghanistan GIS Component**

**Annex 11: DACAAR Integrated Data Management System and GIS Functionality**

**Annex 12: iMMAP Presentation on GIS and DRR in Afghanistan**

**Annex 13: AIMS GIS Lifecycle in Afghanistan**

**Annex 14: UNEP Data and Training Initiatives**

**Annex 15: NORPLAN Trainings on Data Management, Desktop, and Online GIS Technologies**

**Annex 16: Winning maps from “Mapping Afghanistan 2015” Competition**