GOVERNMENT OF PAKISTAN
MINISTRY OF WATER AND POWER
PROJECT MANAGEMENT & POLICY IMPLEMENTATION UNIT (PMPIU)

Water Sector Capacity Building and Advisory Services Project (WCAP)

Development of National Flood Protection Plan-IV (NFPP-IV) and Related Studies to Enhance the Capacity of Federal Flood Commission-FFC

LANDUSE AND DISTRICT LEVEL SUBMERGENCE PLANS

DISTRICT ATTOCK

PUNJAB PROVINCE

JUNE 2015

NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C, BLOCK-N, MODEL TOWN EXTENSION,
LAHORE - PAKISTAN

in association with

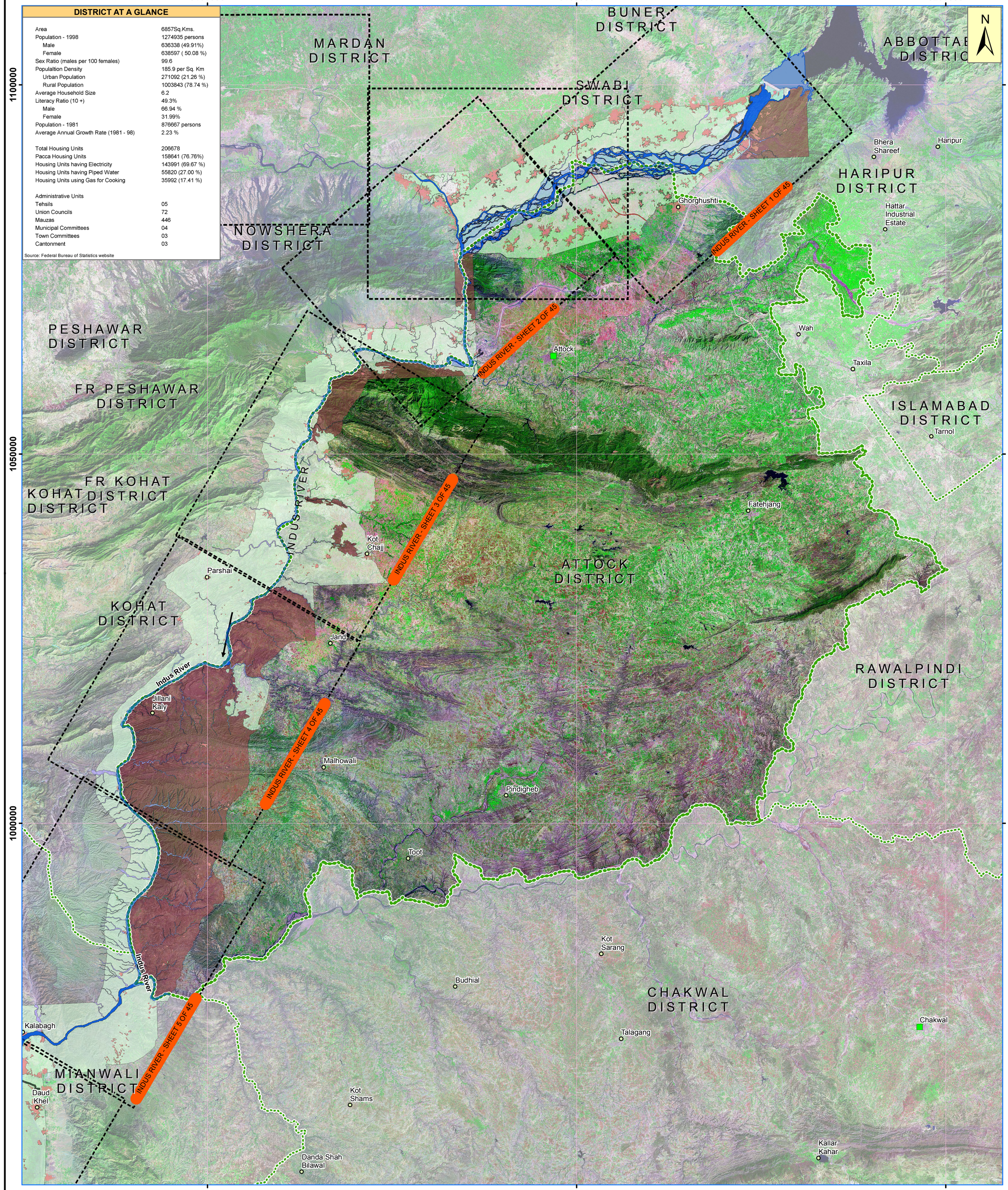
DELTARES
THE NETHERLANDS
P.O. BOX 177, 2600 MH DELFT, ROTTERDAMSEWEG 185, 2629 HD DELFT, THE NETHERLANDS

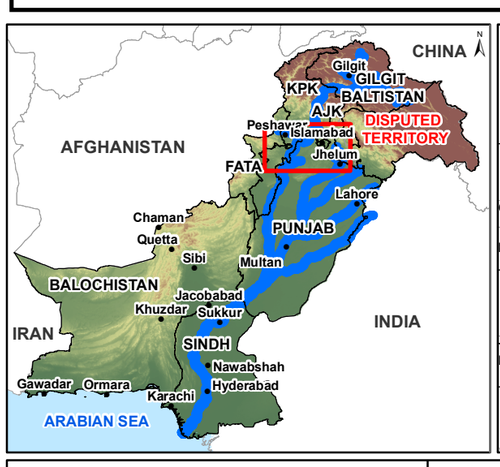
ATTOCK DISTRICT

DISTRICT AT A GLANCE

Area	6857Sq.Kms.
Population - 1998	1274935 persons
Male	636338 (49.91%)
Female	638597 (50.08 %)
Sex Ratio (males per 100 females)	99.6
Populaltion Density	185.9 per Sq. Km
Urban Population	271092 (21.26 %)
Rural Population	1003843 (78.74 %)
Average Household Size	6.2
Literacy Ratio (10 +)	49.3%
Male	66.94 %
Female	31.99%
Population - 1981	876667 persons
Average Annual Growth Rate (1981 - 98)	2.23 %
Total Housing Units	206678
Pacca Housing Units	158641 (76.76%)
Housing Units having Electricity	143991 (69.67 %)
Housing Units having Piped Water	55820 (27.00 %)
Housing Units using Gas for Cooking	35992 (17.41 %)
Administrative Units	
Tehsils	05
Union Councils	72
Mauzas	446
Municipal Committees	04
Town Committees	03
Cantonment	03

Source: Federal Bureau of Statistics website





0 1.75 3.5 7 10.5 14 17.5 Kilometers

Source of Information:
1. Topographic sheets of Survey of Pakistan
2. Freely available satellite imagery

Coordinate System
PROJECTION: Lambert Conformal Conic (LMPAK-I) ,
DATUM: WGS84
Grid Reference is in meters

Date: March 16, 2015

DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

ATTOCK DISTRICT

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

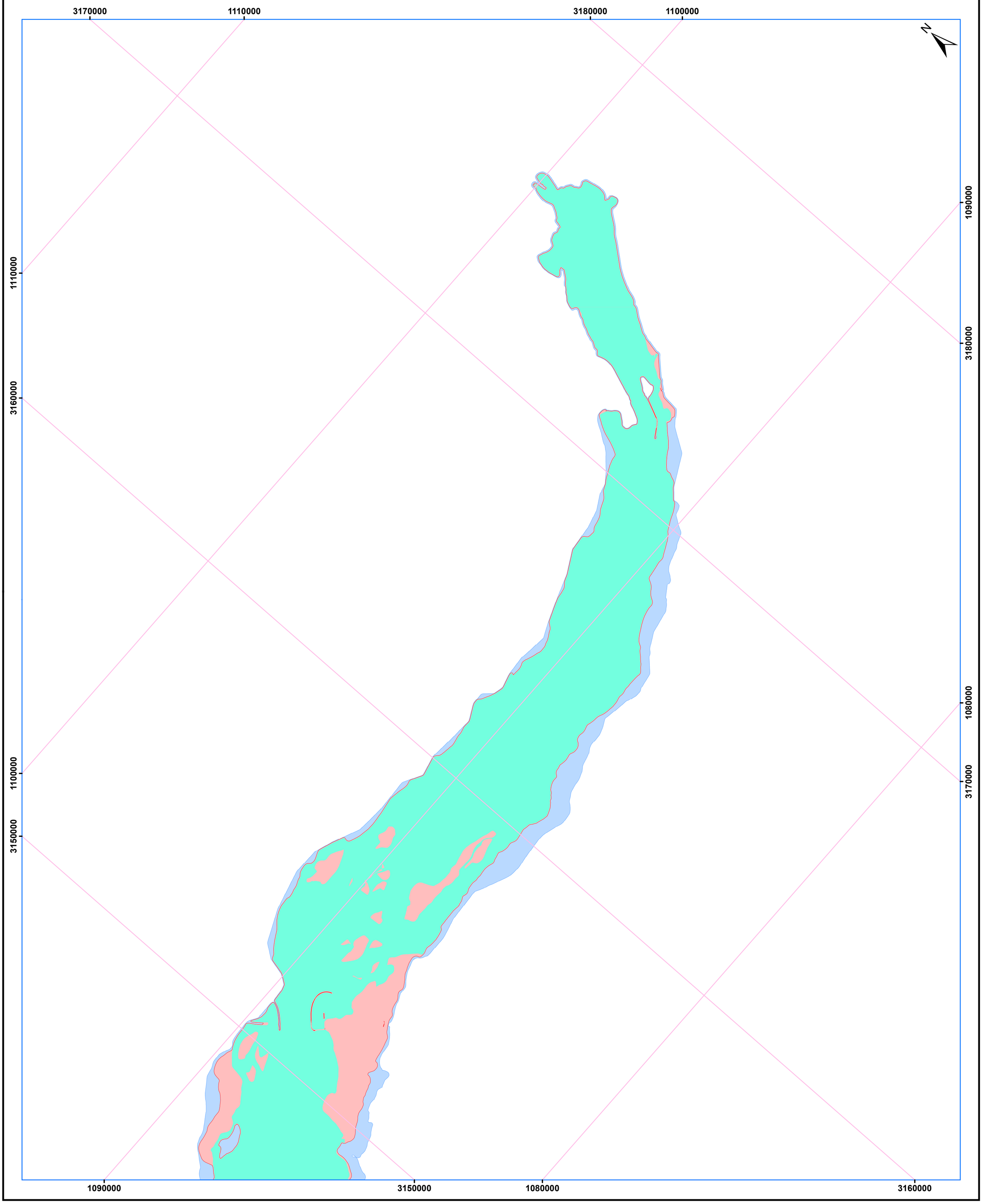
Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C , Block-N, Model Town Extension,
Lahore - Pakistan.

in association with

DELTARES,THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

ATTOCK, BUNER, HARIPUR AND SWABI DISTRICTS



Scale 1:75,000

0 0.5 1 2 3 Kilometers

LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 480,000 cusecs below Tarbela)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 600,000 cusecs below Tarbela)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 770,000 cusecs below Tarbela)

Note: All flood extents are based on breachless conditions

ATTOCK, BUNER, HARIPUR AND SWABI DISTRICTS

3170000 1110000 3180000 1100000

1110000 3160000 1100000 3150000 1090000 3180000 1080000 3170000

N

BUNER DISTRICT

SWABI DISTRICT

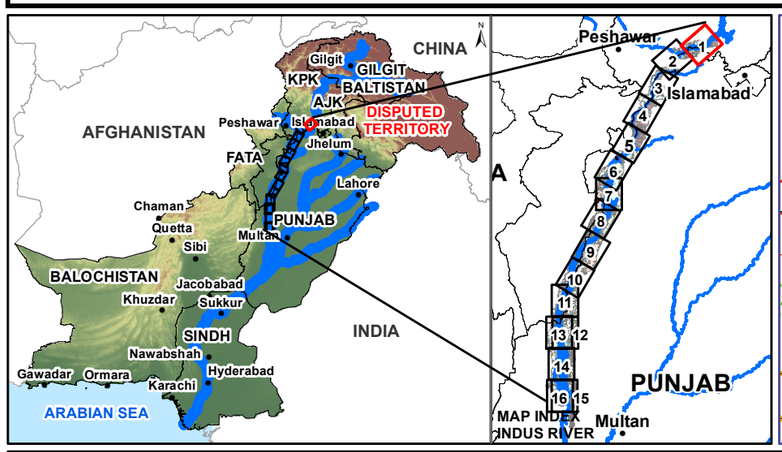
HARIPUR DISTRICT

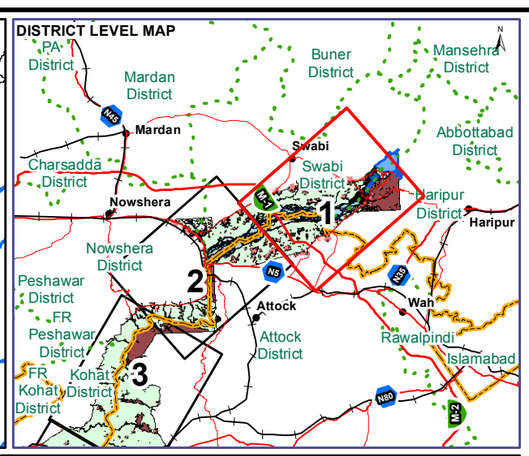
ATTOCK DISTRICT

KPK PROVINCE

PUNJAB PROVINCE

Tarbela Dam
Ghazi-Tarbela Dam Road
Dal
Kukkar Chah
Sheraul Kandao
Sherwal
Mango Kandao
Lughro Kandao
Bilagh
Adalat Colony
Garhi Maira
Hill Top Colony Road
Haripur Road
Kundi
Mehran Colony
Sanober Colony
Mir Khani Kandao
Umar Khana
Sulam Kund
Sira
Right Bank Colony
Hill Top Colony
INDUS RIVER
Kund Mirabad
Sobra City
Salam khand Road
Bharwasa
Ghara
Jamshed Abad
Ghazi
Ghazi-Barotha run of river project
Ghazi
Chamtari Dara
Hamlet Colony
Khalu
Ghazi Barotha Canal
Isa
Jallo
Bai
Jammun
Qazipur
Hasanpur
Aldo
Jabbi
Main Dheri
Nakanchi
Garhi
Sheikh Chuhr
Abdur Rahman
Ghurghushti
Santini
Pinwandi Dheri Baba
Moman Pura
Jalalia
Shinka
Yasin Khurd
Yasin Kalan
Asghar
Salim Khan
Kiln
To Islamabad
Chauthali
Tatari
Abu Bakr
Shahbazgarhi
Hazro
Harun
Bara
Malla
Mararia
Kamil Da Dhok
Hamid
Kalu Kalan
Daman
Malhu Da Dhok
Painda
Topi
Topi Main Road
Phur Main Canal
Kiyara
Ghazi Road
Hamlet
Galla
Batakara Road
Bada Khwar
Topi Batakara Road
Pontia
Bata Kara
Kotha
Kalabat
Zaida Road
Zarobi Road
Faqirabad
Marghuz
Zarobai
Khazana
Thand Kawal
Yousafi Road
Gar Road
Yusufi
Dhok Manara
Kadai
Dodher Road
Dodher
Kotha Distt
Kadai Mindr
Gar Aka Khel
Gar Yara Khel
Rahat Abad Road
Zaida
Zaida Bypass Road
Shah Mansur
Musa Banda
Rana Dheri
Topi Bypass
Khunde Main Lar
Badri Khwar
Swabi Road
Khunda
Ambar
Hund Road
To Peshawar
Pakia
Hund
Mona Banda
Shaikh Dheri
Sheikh Dhear Branch
Motorway Bridge
M-1
Loftan Kot
Balo
Dheri Zakaria
Umardin Kalle
Harian
Swabi Jahangira Road
Salah
Tano Dheri Dist
Nabi
Shaikh Dheri





Scale 1: 75,000

0 0.5 1 2 3 Kilometers

LEGEND

- National Highway
- Metalled Road
- Un-metalled Road
- Track
- Railway Line
- Canal
- Branch
- Drain
- Distributary
- Minor
- Nallah
- Wah
- District Boundary
- Provincial Boundary
- International Boundary

- Barren Area
- Bund / Spur
- Cultivated Area
- Flood Plain
- Grass
- Graveyard
- Hill
- Main/Link Canal, Escape, Spillway
- Motorway
- Mud
- Nallah (Perennial)
- Nallah (Non Perennial)
- Orchard
- Planned Urban Area
- Range Forest
- River
- Sand Dunes
- Town/Village/Settlement
- Water Body

Source of Information:
1. Topographic sheets of Survey of Pakistan
2. Freely available satellite imagery
3. FPSP-II GIS data
4. Shuttle Radar Topographic Mission Data (Resolution:90 m)
5. Survey data of Flood protection embankments and structures

Coordinate System
PROJECTION: Lambert Conformal Conic (LMPAK-I) ,
DATUM: WGS84
Grid Reference is in meters

Date: 29 May, 2015 By Safder Hussain

Note:
The Inventory of structures is shown at the start of this folder.

DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP
INDUS RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

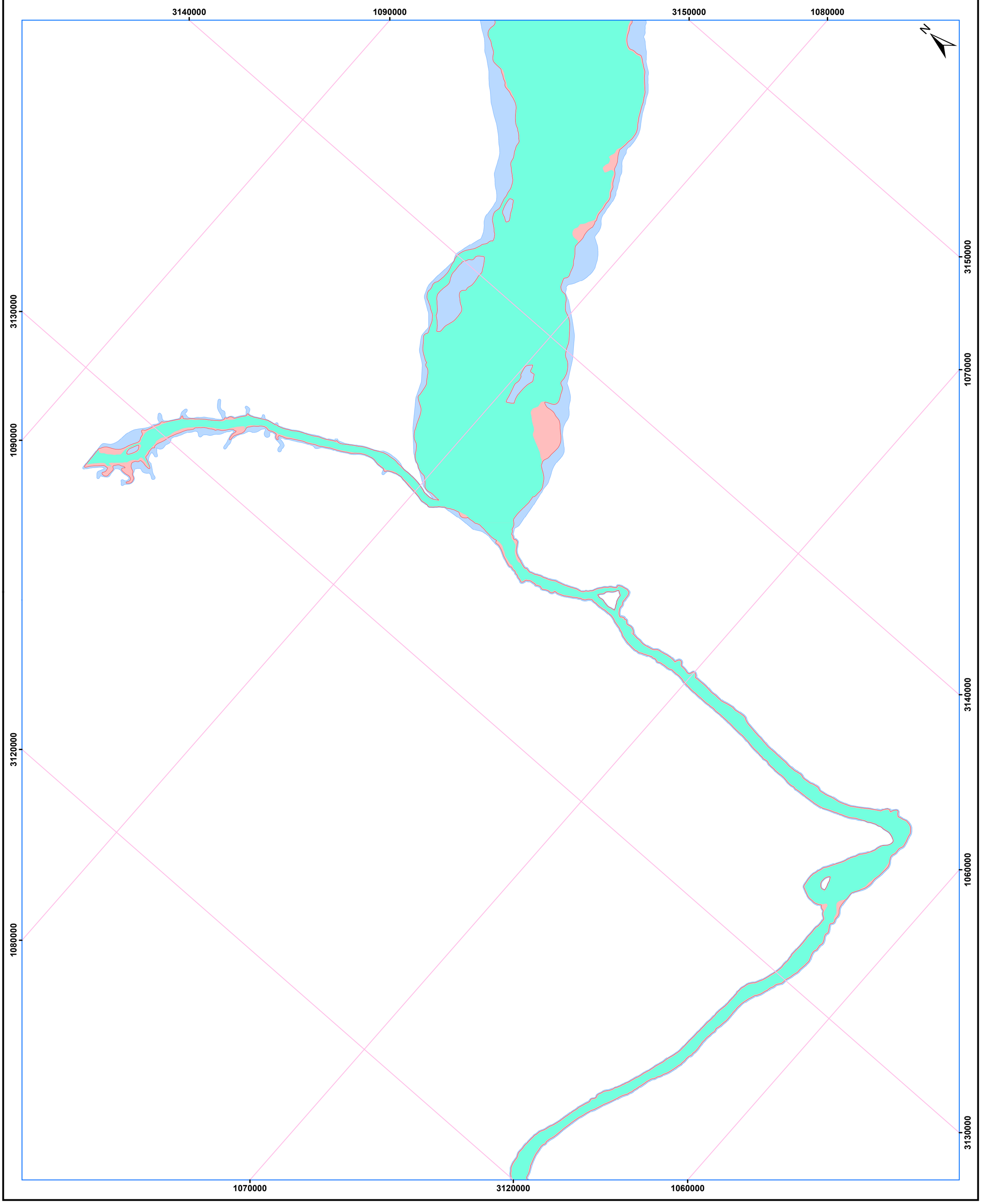
Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C , Block-N, Model Town Extension,
Lahore - Pakistan.

in association with

Deltares Enabling Delta Life
DELTARES,THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

ATTOCK, NOWSHERA AND SWABI DISTRICTS



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0 0.5 1 2 3 Kilometers

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Note: All flood extents are based on breachless conditions

ATTOCK, NOWSHERA AND SWABI DISTRICTS

3140000 1090000 3150000 1080000

3150000 1070000 3140000 1060000 3130000 1050000

3130000 1090000 3120000 1070000 3110000 1060000

3120000 1080000 3110000 1060000 3100000 1050000

1070000 3120000 1060000

SWABI DISTRICT

NOWSHERA DISTRICT

ATTOCK DISTRICT

KPK PROVINCE

PUNJAB PROVINCE

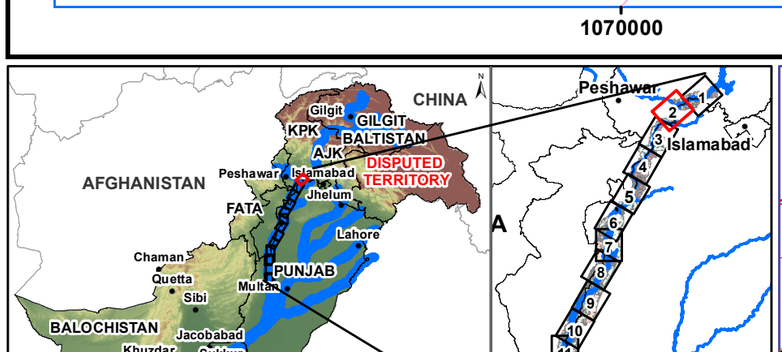
INDUS RIVER

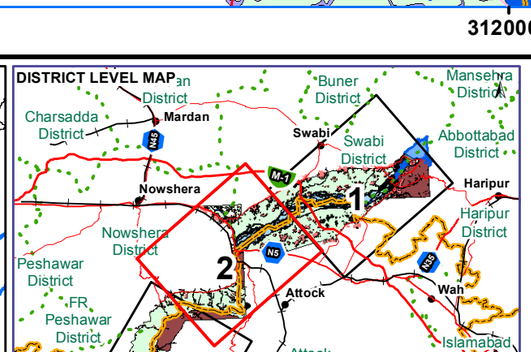
KABUL RIVER

HARO RIVER

Tordher
Manki
Beka
Beka Dheri
Tano
Tano Dheri
Bazar
Roziabad
Natta Dheri
Jabbar
Allahdher
Wasil Abad
Qazi Taia
Jahangira
Main Isa
Nawa Kalai
Naral
Nhalpur
Kund
Shaidu
Jahangira
Akora Khattak
Adamzai
Ziarat Baba
Sirka
Kamilpur
Waisa
Malhu
Tajak
Shadi Khan
Prumali
Walia
Haider
Garhi Matani
Nurpur
Lundi
Fatu Chak
Gondal
Khura Khel
Mansar
Attock Khurd
Attock Bridge
Khairabad
Jabba
Darwazai
Mandor
Dheri
Barotha
Jabbi
Amanpura
Gharibabad
Kawa
Thoa
Bagh
Sewi
Shaheenabad
Gandab
Shawangai
Mana Khel
Khai
Askari Cement Plant
Ghora Mar

Grand Trunk Road
Swabi-Jahangira Road
Jabbal Road
Kund Park Road
Bazar Minor
Way to Azeemgarh
Shah Kalm Khwar
Shadikhan Road
Hazro Road
Melah Shadikhan Road
To Hassan Abdal
Mansar Road
Grand Trunk Road
To Attock
Ghazi-Barotha Canal
Nowshera Road
Nanwala Kas
Gandab Khwar
Shawangi Road
Wagh Tarab Khawar
To Nowshera





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Coordinate System
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DATUM: WGS84
Grid Reference is in meters

Date: 29 May, 2015 By Safder Hussain

Note:
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Scale 1: 75,000

0 0.5 1 2 3 Kilometers

LEGEND

- National Highway
- Metalled Road
- Un-metalled Road
- Track
- Railway Line
- Canal
- Branch
- Drain
- Distributary
- Minor
- Nallah
- Wah
- District Boundary
- Provincial Boundary
- International Boundary
- Barren Area
- Bund / Spur
- Cultivated Area
- Flood Plain
- Grass
- Graveyard
- Hill
- Main/Link Canal, Escape, Spillway
- Motorway
- Mud
- Nallah (Perennial)
- Nallah (Non Perennial)
- Orchard
- Planned Urban Area
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- Town/Village/Settlement
- Water Body

DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP
INDUS RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C , Block-N, Model Town Extension,
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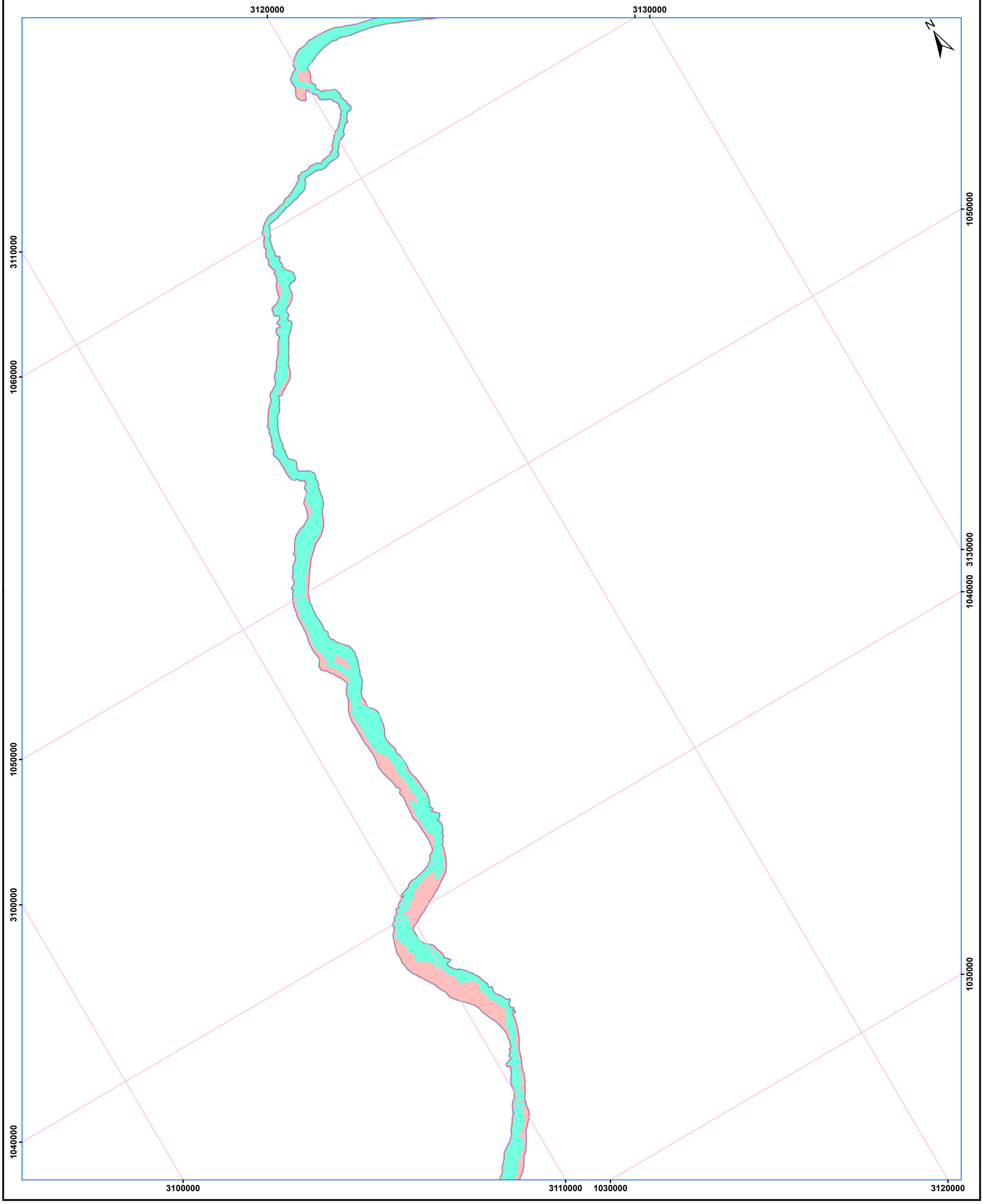
in association with

DELTARES,THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

ATTOCK, KOHAT AND NOWSHERA DISTRICTS



Scale 1:75,000

0 0.5 1 2 3 Kilometers

LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 557,340 cusecs below Attock Bridge)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 673,067 cusecs below Attock Bridge)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 755,209 cusecs below Attock Bridge)

Note: All flood extents are based on breachless conditions

3120000 3130000

3110000 1060000 1050000 3100000 1040000

1050000 3130000 1040000 1030000

NOWSHERA DISTRICT

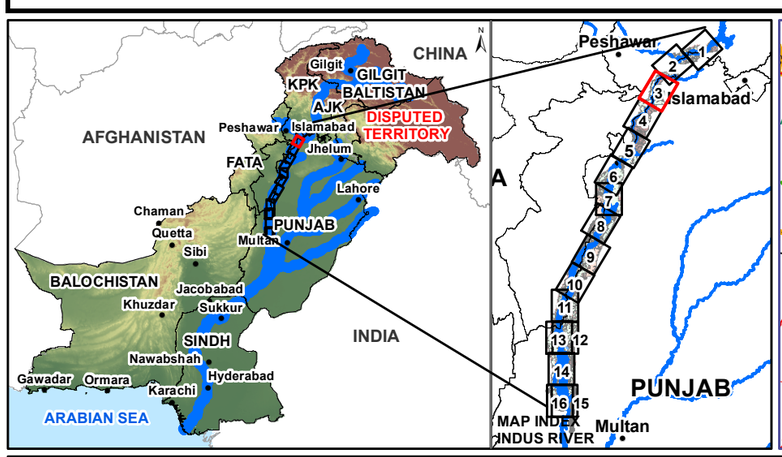
ATTOCK DISTRICT

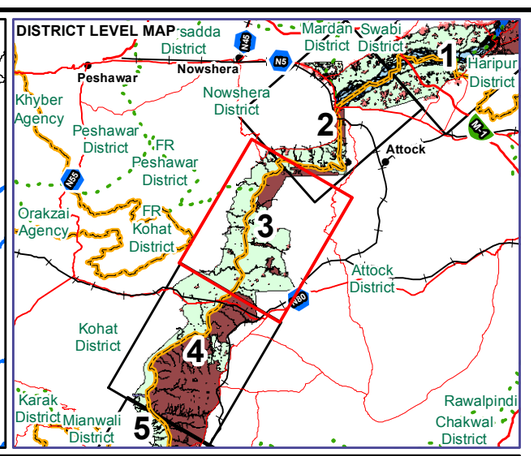
KOHAT DISTRICT

K P K P R O V I N C E

P U N J A B P R O V I N C E

Shagai
Ghora Mar
Sujhanda
Nizampur
Kamar Sar
Nuoh Khwar
Chitta Ka Kas
Sar Toi
Jungrai
Sarkai Algad
INDUS RIVER
Jahila Kas
Sen
Kahi Algada
Dhok Daulat Khan
Dhok Yasin
Dhok Ghulam Haider
Nowshera Road
Dhok Said Rehman
Dhok Khan Mir
Wuch Khwar
Kohat Road
Shadipur
Narra Kas
Dhok Sher Ghulam
Och Khwar
Dhok Badshah
Dhok Zera Din
Dhok Awal Jan M
Dhok Walad Shah
Posta Sanda
Dhok Mushki Kha
Dhok Lalbaz
Dhok Nur Afzal
Dhok Sohib Gul
Zera Algad
Tarkha Algada
Chorlakki
Pari
Imam Shah Ziarat
Nara
Kazimabad
Tehra
Jabba Kas
Sagri
Kundrala
Dandi Jaswal
Namal Kas
Dhok Sanda
Dhok Dhati
Kot Chhaji
Khot Chaji Road
Dhok Malkan
Jalwal
Jhangi
Dhok Biandian
Sankhi Kas
Mari
Dhok Baz
Dhok Alam Sher
Kirri Shaikhan
Dhok Kamar
Nowshera Road
Tarkhobi Algad
Buzargai Algada
Dungi Kas
Dhok Buzra Khel
Dungi Nari
Dhok





Scale 1: 75,000

0 0.5 1 2 3 Kilometers

LEGEND

- National Highway
- Metalled Road
- Un-metalled Road
- Track
- Railway Line
- Canal
- Branch
- Drain
- Distributary
- Minor
- Nallah
- Wah
- District Boundary
- Provincial Boundary
- International Boundary

- Barren Area
- Bund / Spur
- Cultivated Area
- Flood Plain
- Grass
- Graveyard
- Hill
- Main/Link Canal, Escape, Spillway
- Motorway
- Mud
- Nallah (Perennial)
- Nallah (Non Perennial)
- Orchard
- Planned Urban Area
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Coordinate System
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DATUM: WGS84
Grid Reference is in meters

Date: 29 May, 2015 By Safder Hussain

Note:
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DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP
INDUS RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C , Block-N, Model Town Extension,
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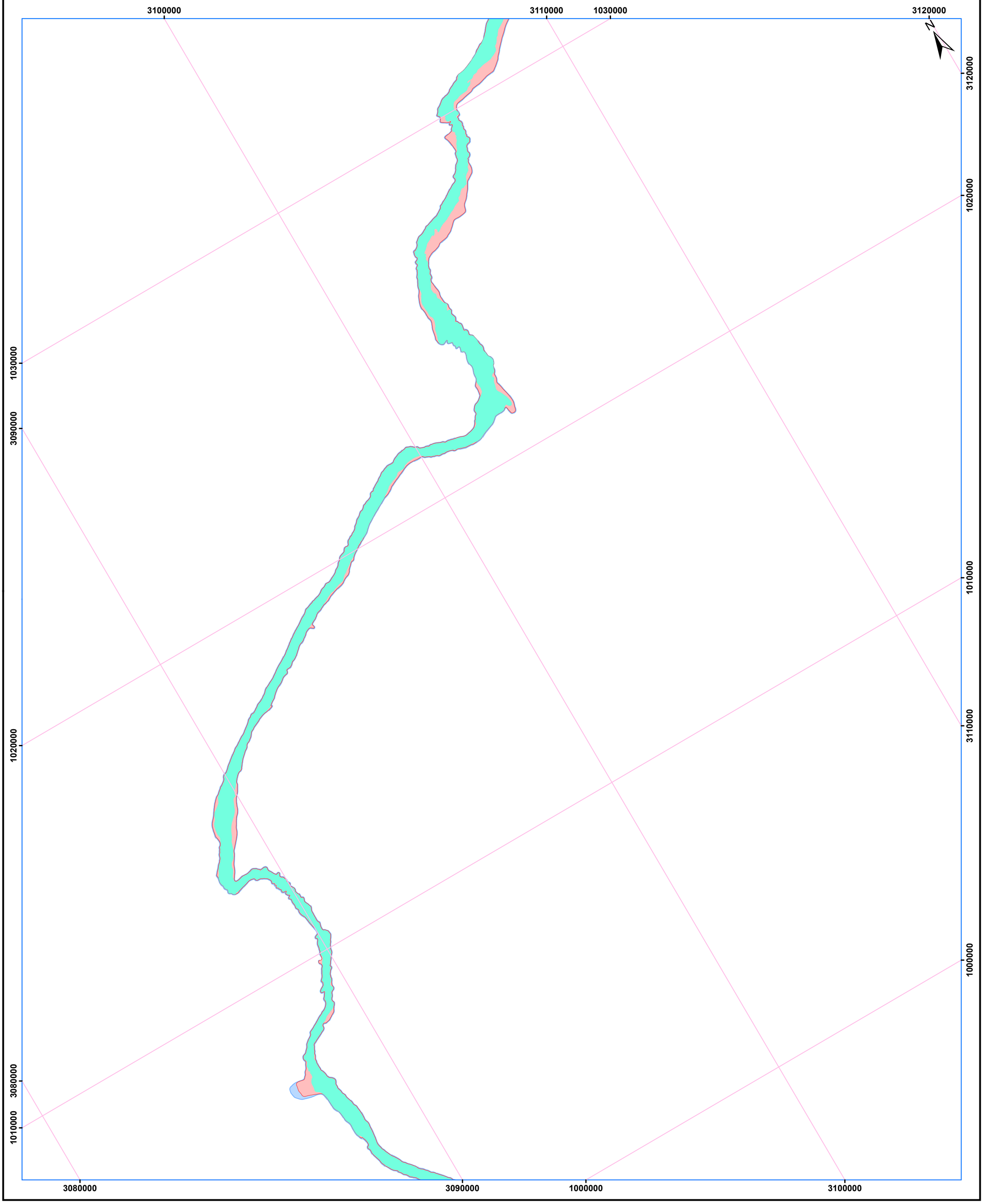
in association with

DELTARES,THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

ATTOCK AND KOHAT DISTRICTS



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LEGEND

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Note: All flood extents are based on breachless conditions

ATTOCK AND KOHAT DISTRICTS

3100000 3110000 1030000 3120000

1030000 3090000 1020000 1010000 3110000

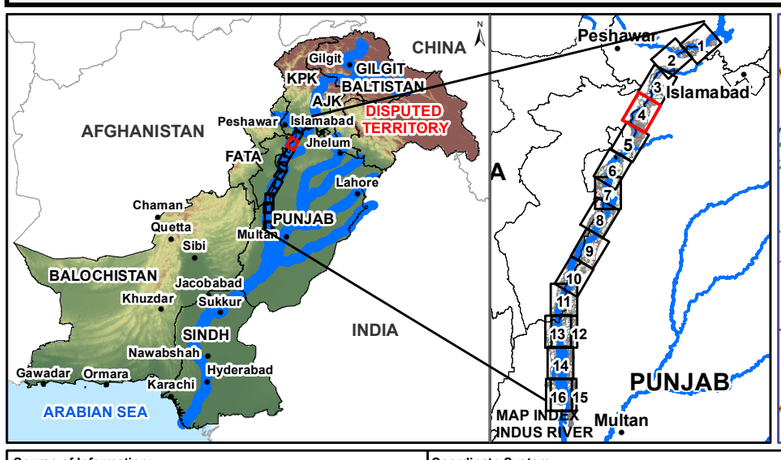
KOHAT DISTRICT

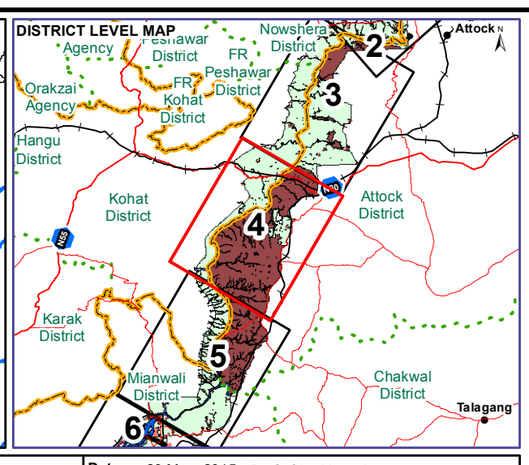
ATTOCK DISTRICT

PUNJAB PROVINCE

K P K PROVINCE

Kandar
Banda Gul Hasan
Gamar Road
Parshai
Nalla Dhok
Gharl Par
INDUS RIVER
Dhok Mori
Dhok Darab Khel
Dhok Ghulam Kheli
Dhok Mankur
To Jand
Khushnal Garh
N80
Tali Banda
Dhok Karam Sherwali
Sanakhi Dhok
Dhok Maud
Tallah Kadah
Beldar
Dhok Karim Khan
Kassab Nallah
Dhok Ghulam Habib
Dhok Talli
Dhok Lan
Chosar Dhok
To Kohat
Grand Trunk Road
Khariot Dhok
Dakhni Oil
Ziarat
Kassab
Nakband
Khariot Dhok
Bela
Rassy Nallah
Mano Malik
Dhok Dheri
Resi Shar
Dhok Alwara
Banda Azad
Dhok Sharbat
Dhok Loharan
Kohat Toi
Toi Banda
Uchhri Rs
Jaba
Dhok Sira
Jand Road
Dhok Rehan
Dhok Banwali
Dhok Abbas
Dhok Body Guard
Dhok Jiwan Khan
Dhok Fateh Khan
Porat
Dhok Khappian
Dhok Sarwan
Ratti Kheri
Kund
Jandawali Dhok
Girdi
Surgwali Dhok
Jhamat
Dhok Manjokha
Dhok Pir Kheli
Khatako Banda
Dopar
Dakhnir
Dhok Rayat Khan
Toraiwali
Dhok Hindu
Sultan Dhok
Dhok Sultan
Dhok Uchhri
Dhokm Ghulam Nabi
Dhok Bazgul
Siro Meta Dhok
Amir Afzal
Chhab
Haya Khan Banda
Kak Algad
Dhok Ghazi
Dhok Kori
Dhok Malikan
Dhok Chashmai
Mirza Dhok
Dhok Kabal
Lakoi Mar
Bahadar Khel
Kanjur
Malangi
Sisol Algad
Mochi Shahr
Naz Gul Dhok
Wali Mela
Torang Mela
Dhok Gola
Zangora
Touda Mela
Sawara Algad
Tehi Toi
INDUS RIVER
Sharqi
Tora Bera
Goah Khwula Goah
3080000 3090000 1000000 3100000





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0 0.5 1 2 3 Kilometers

LEGEND

- National Highway
- Metalled Road
- Un-metalled Road
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DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP
INDUS RIVER

Client :
FEDERAL FLOOD COMMISSION
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Consultants:
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1-C , Block-N, Model Town Extension,
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DATUM: WGS84
Grid Reference is in meters

Date: 29 May, 2015 By Safder Hussain

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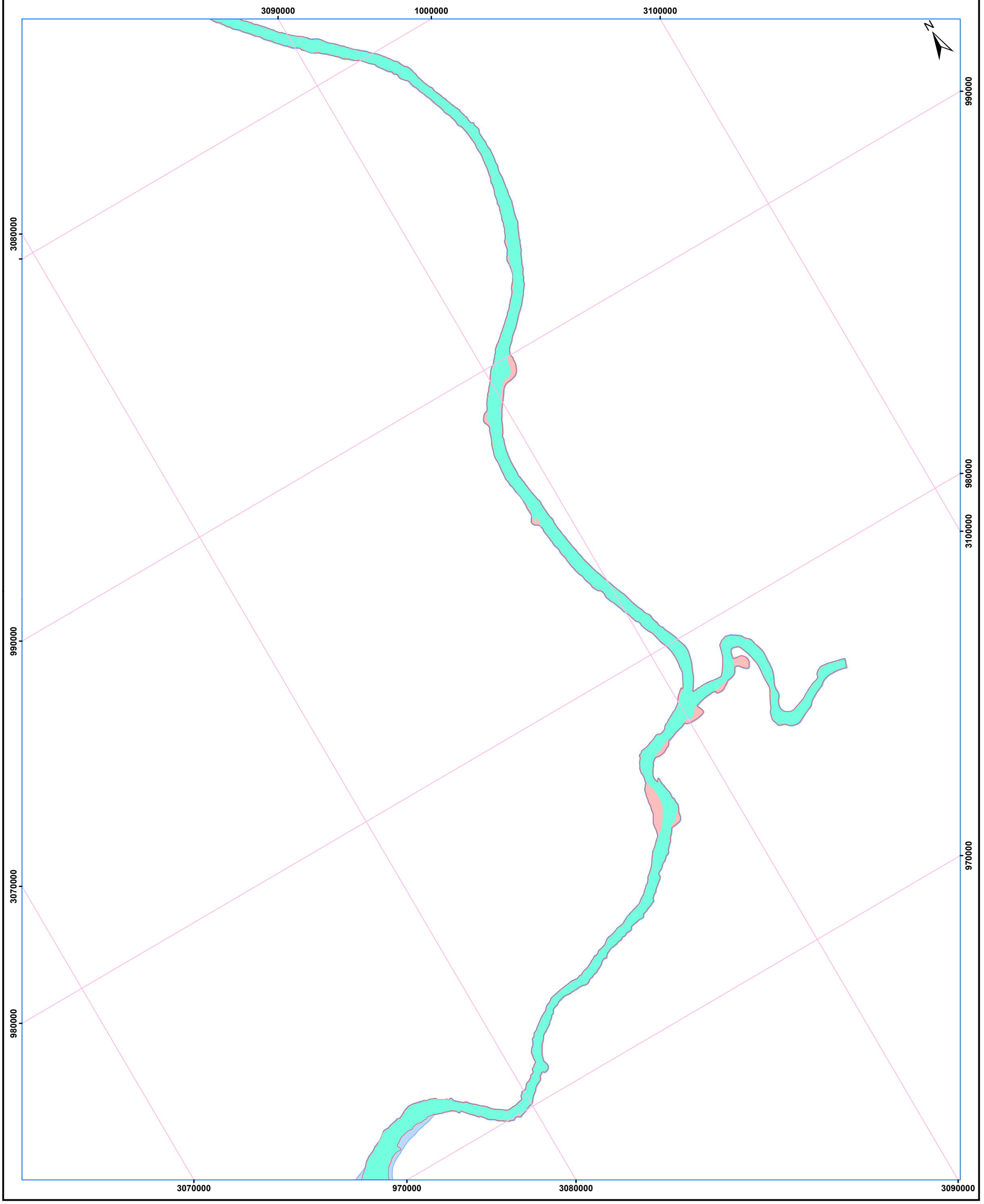
The Inventory of structures is shown at the start of this folder.

ATTOCK, KOHAT AND MIANWALI DISTRICTS



Scale 1:75,000

0 0.5 1 2 3 Kilometers

LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 557,340 cusecs below Attock Bridge)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 673,067 cusecs below Attock Bridge)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 755,209 cusecs below Attock Bridge)

Note: All flood extents are based on breachless conditions

3090000 1000000 3100000

3080000 990000 980000 970000

3070000

KOHAT DISTRICT

ATTOCK DISTRICT

MIANWALI DISTRICT

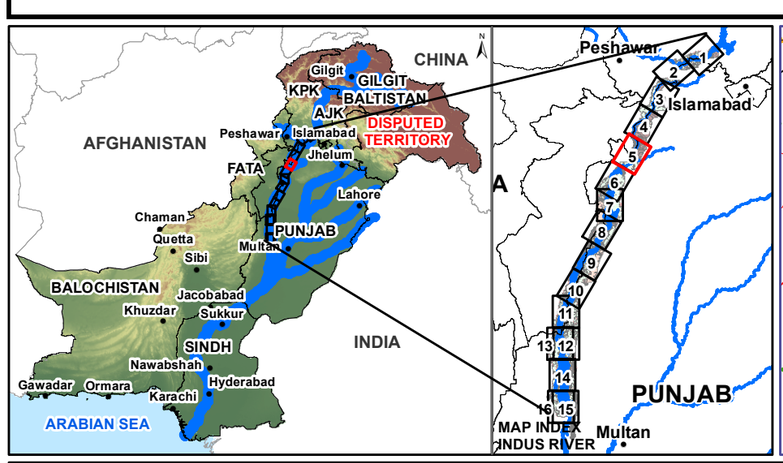
KPK PROVINCE

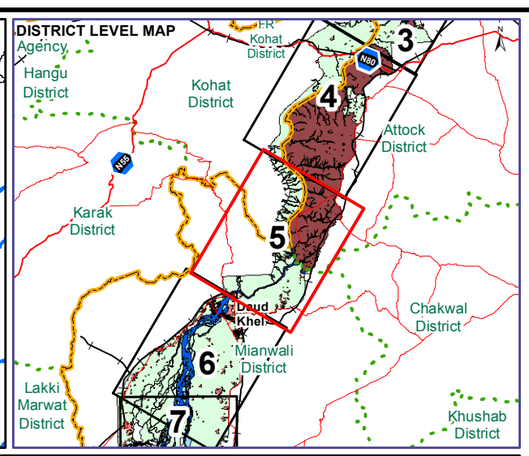
PUNJAB PROVINCE

INDUS RIVER

Shitaq Algad, Sui Mela, Nara Khela Algad, Ranak Algad, Kanjka, Pakka Algad, Jamal Mela, Makhad Rehmanabad Road, Shaikh Mali Algad, Baddu, Towa Algad, Rakhwan, Dhok Mallawali, Dabbaki, Keki, Kayyaki-Maira Link Road, Dhok Gola, Tah, Jambra, Chisalr Algad, To Shakardara, Kukranwala, Purani Mari, Mari Indus, Kalabagh, Nawan Shahr, Basti

Paranga Algad, Nakka Chowk, Beheramabad, Nakka Afghan, Dhok Bazgul, Nakka Khurd, Banko Algad, Injra Afghan, Dhok Nawah Khel, Chhui, Injra Road, Lunda, Bandiwan, Makhad Wahan, Makhad Sharif, Nalhad, Bhata, Dhokh Nalhad, Bhangi Khel, Nalhad Wahan, Bhata Wahan, Madgon, Dhok Charagh, Dhok Haliman, Mirzaki, Bhochun, Dhok Bhata, Bahadar Khel, Kirri Ziarat, Dhok, Rakhwan, Dhok Noba Khel, Fateh Khel, Jamburi, Kani, Anar Gul Dhok, Ghazi Khel, Bandal Khel, Soan River, Dhok Kacha, Dhok Bharthal, Pir Phal, Sanni Nallah, WAPDA Colony, Kiri Kaptan, Langarkhel, Sarkandi, Basti Dharoon, Naghar Khel, Banni, Jalah, Gulab Khel, Santar Banni, Dhabbar Chan, Feroz Khel, Qatang Nallah, Rikhi Wahan, Ainnwan Nallah





Scale 1: 75,000

0 0.5 1 2 3 Kilometers

LEGEND

- National Highway
- Metalled Road
- Un-metalled Road
- Track
- Railway Line
- Canal
- Branch
- Drain
- Distributary
- Minor
- Nallah
- Wah
- District Boundary
- Provincial Boundary
- International Boundary

- Barren Area
- Bund / Spur
- Cultivated Area
- Flood Plain
- Grass
- Graveyard
- Hill
- Main/Link Canal, Escape, Spillway
- Motorway
- Mud
- Nallah (Perennial)
- Nallah (Non Perennial)
- Orchard
- Planned Urban Area
- Range Forest
- River
- Sand Dunes
- Town/Village/Settlement
- Water Body

Source of Information:
1. Topographic sheets of Survey of Pakistan
2. Freely available satellite imagery
3. FPSP-II GIS data
4. Shuttle Radar Topographic Mission Data (Resolution:90 m)
5. Survey data of Flood protection embankments and structures

Coordinate System
PROJECTION: Lambert Conformal Conic (LMPAK-I) ,
DATUM: WGS84
Grid Reference is in meters

Date: 29 May, 2015 By Safder Hussain

Note:
The Inventory of structures is shown at the start of this folder.

DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP
INDUS RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C , Block-N, Model Town Extension,
Lahore - Pakistan.

in association with

Deltares Enabling Delta Life

DELTARES,THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

Inundation Depth of Settlements in District Attock

Upper Indus River - Sheet No. 2

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 423,780 Cusec below Tarbela		Inundation Depth at Discharge of 494,410 Cusec below Tarbela		Inundation Depth at Discharge of 557,977 Cusec below Tarbela	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	Attock Fort	L	Attock	0.0	0.0	0.00	0.00	0.00	0.10
2	Garhi Matani	L	Attock	0.0	0.0	0.00	0.00	0.00	0.85
3	Malahi Tola	L	Attock	0.0	0.0	0.00	0.00	0.00	0.10

Upper Indus River - Sheet No. 5

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 557,340 Cusec below Attock Bridge		Inundation Depth at Discharge of 673,067 Cusec below Attock Bridge		Inundation Depth at Discharge of 755,209 Cusec below Attock Bridge	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	Makhad Sharif	L	Attock	0.0	0.0	0.00	0.00	0.00	0.10
2	Rukhwan	L	Attock	0.0	0.0	0.00	0.00	0.00	0.10

Zone*

H= High Risk Inundation Zone corresponds to 5 yr return period flood

M=Medium Risk Inundation Zone corresponds to 15 yr return period flood

L= Low Risk Inundation Zone corresponds to 50 yr return period flood