

# SINDH

## RIVER BASIN ATLAS

NOVEMBER 2023

Version - 1



Centre for Ganga River Basin Management and Studies  
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## National Mission for Clean Ganga (NMCG)

NMCG is the implementation wing of National Ganga Council which was setup in October 2016 under the River Ganga Authority order 2016. Initially NMCG was registered as a society on 12th August 2011 under the Societies Registration Act 1860. It acted as implementation arm of National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA) 1986. NGRBA has since been dissolved with effect from the 7th October 2016, consequent to constitution of National Council for Rejuvenation, Protection and Management of River Ganga (referred to as National Ganga Council).

[www.nmcg.in](http://www.nmcg.in)

## Centre for Ganga River Basin Management and Studies (cGanga)

cGanga is a think tank formed under the aegis of NMCG, and one of its stated objectives is to make India a world leader in river and water science. The Centre is headquartered at IIT Kanpur and has representation from most leading science and technological institutes of the country. cGanga's mandate is to serve as think-tank in implementation and dynamic evolution of Ganga River Basin Management Plan (GRBMP) prepared by the Consortium of 7 IITs. In addition to this, it is also responsible for introducing new technologies, innovations, and solutions into India.

[www.cganga.org](http://www.cganga.org)

## Acknowledgment

This river atlas document is a collective effort of a number of experts, institutions and organisations, some who had been associated with preparing the Ganga River Basin Management Plan (GRBMP) submitted to the Government of India in 2015, and others who joined later with their own independent expertise and enthusiasm. Contributions to the photographs and images for this document by individuals are gratefully acknowledged.

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# PREFACE

The Centre for Ganga River Basin Management and Studies (“cGanga”) was established in the year 2016 as a comprehensive think-tank for river restoration and to assist the National Mission for Clean Ganga (NMCG), Jal Shakti Ministry, GoI, for “continual scientific support in the implementation and dynamic evolution of the Ganga River Basin Management Plan” for conservation of National River Ganga. In keeping with this goal, cGanga has been actively developing detailed knowledge capsules, tools and procedures to enable comprehensive and early rejuvenation of the Ganga River network across the whole basin. While a river basin approach is essential for analyzing and comprehending the Ganga river’s status and needs to regain her wholesomeness, the implementation strategies of the required interventions must keep in mind the role and individuality of each State. Thus, it is necessary to focus on state-level sub-strategies of natural resource management for holistic revival of River Ganga.

The present document aims to offer a comprehensive overview of the river network within the Sindh Basin, which extends across areas in the states of Uttar Pradesh and Madhya Pradesh within the Ganga Basin. This Atlas was created entirely by cGanga, with original mapping of all identifiable rivers, and with selective additional information culled from different sources for completeness. Many of the rivers and maps given here are not readily available elsewhere, and we expect them to prove useful to the many Central, State, and other organizations engaged in the river, water or natural resource management.

In preparing this document dedicated members of cGanga spent a lot of time in diligently studying, analysing, acquiring and compiling diverse information from diverse sources. Many people and organisations outside cGanga also helped in its preparation, which aided in its comprehensiveness. We are grateful to one and all of them.

**VINOD TARE**

Professor & Founding Head, cGanga  
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## ACRONYMS AND ABBREVIATIONS

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cGanga : Centre for Ganga River Basin Management and Studies

Cumec : Cubic meter per second

CGWB : Central Ground Water Board

CWC : Central Water Commission

DEM : Digital Elevation Model

ESRI : Environmental Systems Research Institute

GIS : Geographic Information System

GRBMP : Ganga River Basin Management Plan

Km : Kilometer

LULC : Land Use/ Land Cover

M : Meter

mm : millimeter

NWIC : National Water Informatics Center

SoI : Survey of India

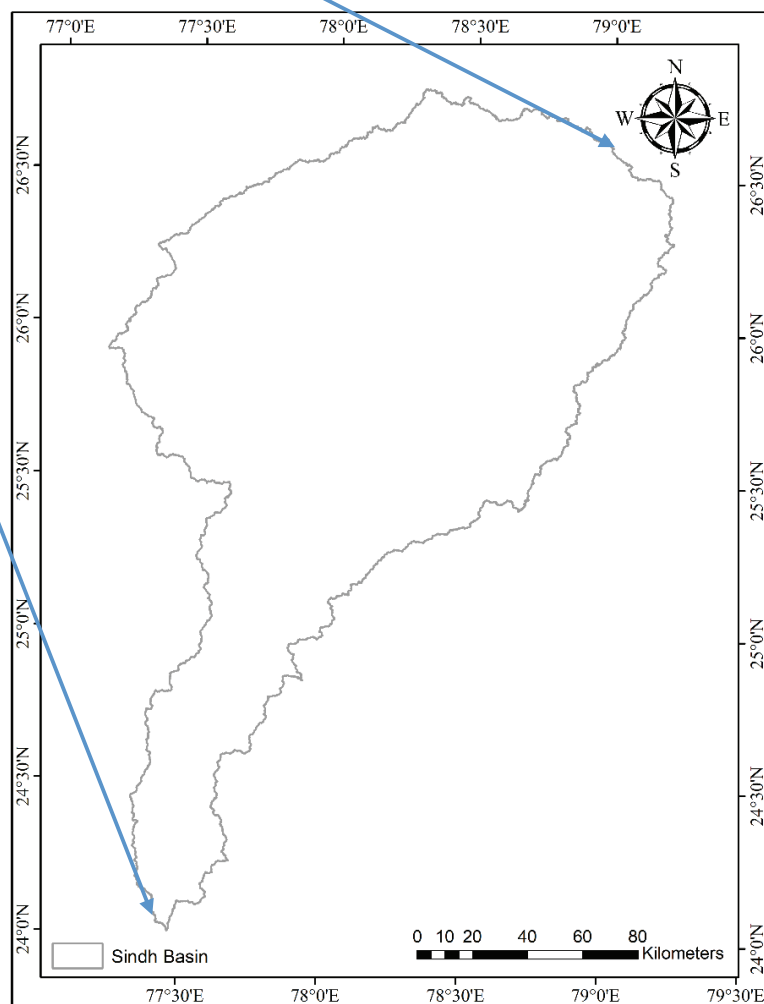
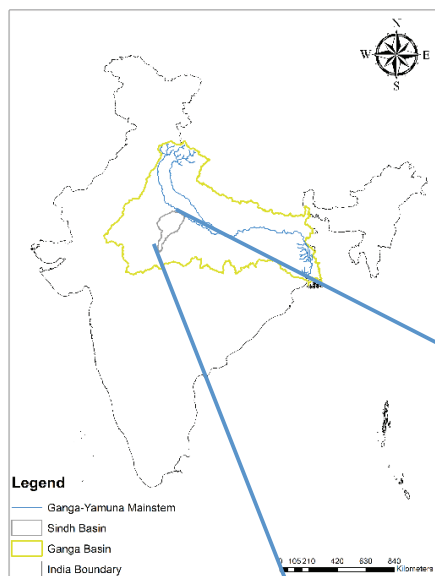
Sq. Km : Square Kilometer

SWAT : Soil & Water Assessment Tool

## INTRODUCTION

The Sindh River courses through Madhya Pradesh and Uttar Pradesh in Ganga basin, joining the Yamuna River as one of its tributaries. The Sindh River originates on the Malwa Plateau in Vidisha district, flows in a north-northeast direction through Guna, Ashoknagar, Shivpuri, Datia, Gwalior, and Bhind districts in Madhya Pradesh. Its course leads it to meet the Yamuna River in Jalaun district, Uttar Pradesh, shortly after the Chambal River merges with the Yamuna. Major tributaries flow into the Sindh drainage basin like Parbati, Pahuj, Kwari (Kunwari), and Mahuar etc.

The present volume is an attempt to map the rich river network of Sindh basin in as fine a detail as possible. Much of the information contained in this River Atlas is created from available earth images with appropriate data and image processing tools and software on the GIS platform. Naturally, there may be shortcomings in some of the maps herein, including missing small streams, which can be expected to be duly refined and included in later versions. In the meanwhile, it is hoped that this Atlas will provide a useful window to the available River resources.



**Figure: Location of Sindh Basin**

## SINDH BASIN: SALIENT FEATURES

| S No | Particulars                                | Details                                                                          |
|------|--------------------------------------------|----------------------------------------------------------------------------------|
| 1    | State Extent                               | Latitude: 24° 10' & 26° 40' N and<br>Longitude: 77° 10' & 79° 15' E              |
| 2    | Total Geographical Area (sq. km)           | 27860                                                                            |
| 3    | Forest Area (Hectare)                      | --                                                                               |
| 4    | Area contributing to Ganga Basin (sq km)   | 27860                                                                            |
| 5    | Percentage of the Ganga Basin Area (India) | 3.23                                                                             |
| 6    | Districts (Census 2011)                    | 14 (Uttar Pradesh: 04; Madhya Pradesh: 10)                                       |
| 7    | Towns (Census 2011)                        | (Class I: 05; Class II: 02; Class III: 14; Class IV: ;<br>Class V: ; Class VI: ) |
| 8    | Total Population (Census 2011)             | --                                                                               |
| 9    | % Population in Ganga Basin                | --                                                                               |
| 10   | Gram Panchayats                            | --                                                                               |
| 11   | Census Villages (Census 2011)              | 4,631                                                                            |
| 12   | Average Annual Rainfall (mm)               | 800 -1250                                                                        |
| 13   | Average Temperature Range (oC)             | 05 - 45                                                                          |
| 14   | Major Rivers                               | Parbati, Pahuj, Kwari (Kunwari), and Mahuar                                      |
| 15   | Number of Major Basins                     | --                                                                               |
| 16   | Number of Water Resources Structures       | (Dams: 20, Barrages: 02, Weir: 02,<br>Anicuts 01, Lifts, Power houses)           |
| 17   | Number of Ground Water Observation wells   | Level: 750<br>Quality: 114                                                       |

## SINDH BASIN: RIVERS TRAVERSING THROUGH VARIOUS DISTRICTS

| S No | State          | District   | Area (Sq. Km) | Population (Census 2011) | Growth Rate (%) | Density | Rivers                                                                                                                                                                                                                                                              |
|------|----------------|------------|---------------|--------------------------|-----------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Uttar Pradesh  | Etawah     | 2,311         | 15,81,810                | 12.9            | 684     | Kunwari , Sindh                                                                                                                                                                                                                                                     |
| 2    |                | Jalaun     | 4,565         | 16,89,974                | 19.28           | 370     | Bhadaiyan, Kahrhai, Khar, Kunwari, Mirga Nadi, Narel, Pahuj, Sindh, Sindh                                                                                                                                                                                           |
| 3    | Madhya Pradesh | Ashoknagar | 4,674         | 8,45,071                 | 22.66           | 181     | Aerma, Ahir, Asarh, Banait, Bandiya, Chooch, Dharma Jharo, Ghura, Ghura, Indar, Kanera, Katai, Khera, Khod, Mohiya, Motiya, Niwari, Palko, Panha Jharo, Patwa, Piriya, Senduwa, Sindh,Umarwaro                                                                      |
| 4    |                | Bhind      | 4,459         | 17,03,005                | 19.25           | 382     | Asan, Ashna, Barwaha, Barwaho, Kahrhai, Kala, Kamain, Khar, Kher,Kunwari, Mirga, Morar, Narel, Saon Jhilmil, Sindh, Barwaho, Sukh, Sunao, Vaisali                                                                                                                   |
| 5    |                | Datia      | 2,902         | 7,86,754                 | 18.4            | 271     | Angori, Bakri Ka Nala, Barwaha Nala, Barwaho Nadi, Barwaho, Chakora, Ghar Ghat Ka Nala, Kahrhai, Kheri Ka Nala, Laraiyakhar Nala, Mahuar Nadi, Mirga, Non Nadi, Pahuj River,Parron Nala, Sindh river, Sonya Nala, Tendu Nala                                        |
| 6    |                | Gwalior    | 4,560         | 20,32,036                | 24.41           | 446     | Asan,Ban Khoh, Bari Khoh, Barwaho, Barwaho, Bhadauna, Chhachhundar, Chinaur, Gobardha Khoh, Jamdaro, Jhinni, Jor, Larai, Larma, Lirma, Maingra, Mata Khoh, Morar, Morkuri, Narkhara, Narkhara, Non, Parbati, Parwav, Sankh,Sindh, Sukh, Sukha, Sukha,Vaisali, Besil |
| 7    |                | Morena     | 4,999         | 19,65,970                | 23.38           | 394     | Asan, Bhaunsora Nala, Gurah, Kachucha, Katila, Kunwari, Parbati, Sankh, Sauh, Sukhdini                                                                                                                                                                              |
| 8    |                | Sheopur    | 6,606         | 687861                   | 22.94           | 104     | Asan, Banda, Kunwari, Parbati                                                                                                                                                                                                                                       |

| S No | State          | District | Area (Sq. Km) | Population (Census 2011) | Growth Rate (%) | Density | Rivers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|----------------|----------|---------------|--------------------------|-----------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9    | Madhya Pradesh | Shivpuri | 10,666        | 1726050                  | 22.74           | 171     | Aerma, Ahir, Angori, Asarh, Badhai, Banda Nala, Barua, Baseri, Bilrai, Bilwa, Chaumasiya, Chhan Ki, Chooch, Dabri, Dharma Jharo, Dundai, Ghonchi, Indar, Jamniya, Jhirna, Karhai, Karobaha, Kasna, Khaunna, Khirai, Koyala, Kunwari, Kurrao, Madar, Mahuar, Maura Nala, Motiya Nala, Nadho Nala, Narai Nala, Narhikhar Nala, Orakhar Nala, Paduri, Palko, Panha Jharo, Panihanghat, Par, Parbati, Paronch, Patapura, Pathoriyoa, Nahey, Patriya, Piprodha, Popta, Renwaja, Silaiya Nadi, Sindh, Sindh river, Sonya, Sonya, Somia, Sukdeni, Sukha Jharo, Tumdhar, Visayawar. |
| 10   |                | Vidisha  | 7,371         | 14,58,875                |                 | 198     | Burh, Katai, Sindh,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 11   |                | Guna     | 6390          | 2,49,000                 | 26.91           | 194     | Burh, Dharma Jharo, Ghura, Gomti, Jamra, Kanera, Katai, Kharia, Khod Ka, Niwari, Panha Jharo, Pania, Pararia, Piriya, Senduwa, Sindh.                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## SINDH BASIN: MAJOR DAMS ON THE RIVER AND HER TRIBUTARIES

| S. No | Districts  | Name                            | River           | Status             | Type                        | Length (m) | Max height above foundation | Year comp | Purpose                             |
|-------|------------|---------------------------------|-----------------|--------------------|-----------------------------|------------|-----------------------------|-----------|-------------------------------------|
| 1     | Ashoknagar | Amahi Dam                       | Akhebar Nadi    | Completed          | Earthen                     | 2700       | 14.63                       | 1917      | Irrigation, Drinking / Water Supply |
| 2     | Ashoknagar | Ashok Nagar (Tulsi Sarovar) Dam | Local           | Completed          | Earthen                     | 911.35     | 11.8                        | 1916      | Irrigation                          |
| 3     | Ashoknagar | Bharoli Dam                     | Local           | Completed          | Earthen                     | 2790       | 12.19                       | 1915      | Irrigation                          |
| 4     | Ashoknagar | Keshopur Dam                    | Local           | Completed          | Earthen                     | 1432       | 10.82                       | 1916      | Irrigation                          |
| 5     | Ashoknagar | Koncha Dam                      | Koncha          | Completed          | Earthen                     | 3169.93    | 29.87                       |           | Irrigation                          |
| 6     | Gwalior    | Birpur Dam                      |                 | Completed          | Earthen                     |            |                             |           | Irrigation                          |
| 7     | Gwalior    | Himmatgarh Dam                  |                 | Completed          | Earthen                     | 384        | 21.33                       |           | Irrigation                          |
| 8     | Gwalior    | Pehsari Dam                     | Mowar           | Completed          | Earthen                     | 2150       | 24.05                       | 1984      | Irrigation, Drinking / Water Supply |
| 9     | Gwalior    | Ramova Dam                      | Londra Nadi     | Completed          |                             |            |                             | 1931      | Irrigation                          |
| 10    | Morena     | Jawahargarh Dam                 | Chamleri        | Completed          | Earthen / Gravity & Masonry | 1052       | 10.67                       | 1899      | Irrigation                          |
| 11    | Sheopur    | Aoda (Awda) Dam                 | Seep            | Completed          | Earthen                     | 1158       | 16.7                        | 1934      | Irrigation                          |
| 12    | Sheopur    | Birpur Dam                      | Maithi kho      | Completed          | Earthen                     | 2255       | 13.49                       | 1908      | Irrigation                          |
| 13    | Shivpuri   | Adner Dam                       | Sind            | Completed          | Earthen                     | 1280       | 12.2                        | 1911      | Irrigation                          |
| 14    | Shivpuri   | Akhajhiri Dam                   | Akhajhiri Nalla | Completed          | Earthen                     | 2055       | 15.4                        | 1973      | Irrigation                          |
| 15    | Shivpuri   | Bairar Dam                      | Local           | Completed          | Earthen                     | 1950       | 11.33                       | 1996      | Irrigation                          |
| 16    | Vidisha    | Bagharu Dam                     | Bagharu         | Under Construction | Earthen                     | 2255       | 15                          |           | Irrigation                          |
| 17    | Vidisha    | Bhawanikheda Dam                | Local           | Completed          | Earthen                     | 330        | 11.37                       | 1991      | Irrigation                          |
| 18    | Vidisha    | Dhanmarahi Dam                  | Local           |                    |                             | 772        | 16                          |           | Irrigation                          |
| 19    | Guna       | Bandia Dam                      | Negri           | Completed          | Earthen                     | 1285       | 25.55                       | 1994      | Irrigation                          |
| 20    | Guna       | Khanpura Dam                    | Local           | Completed          | Earthen                     | 720        | 14.45                       | 1907      | Irrigation, Drinking / Water Supply |

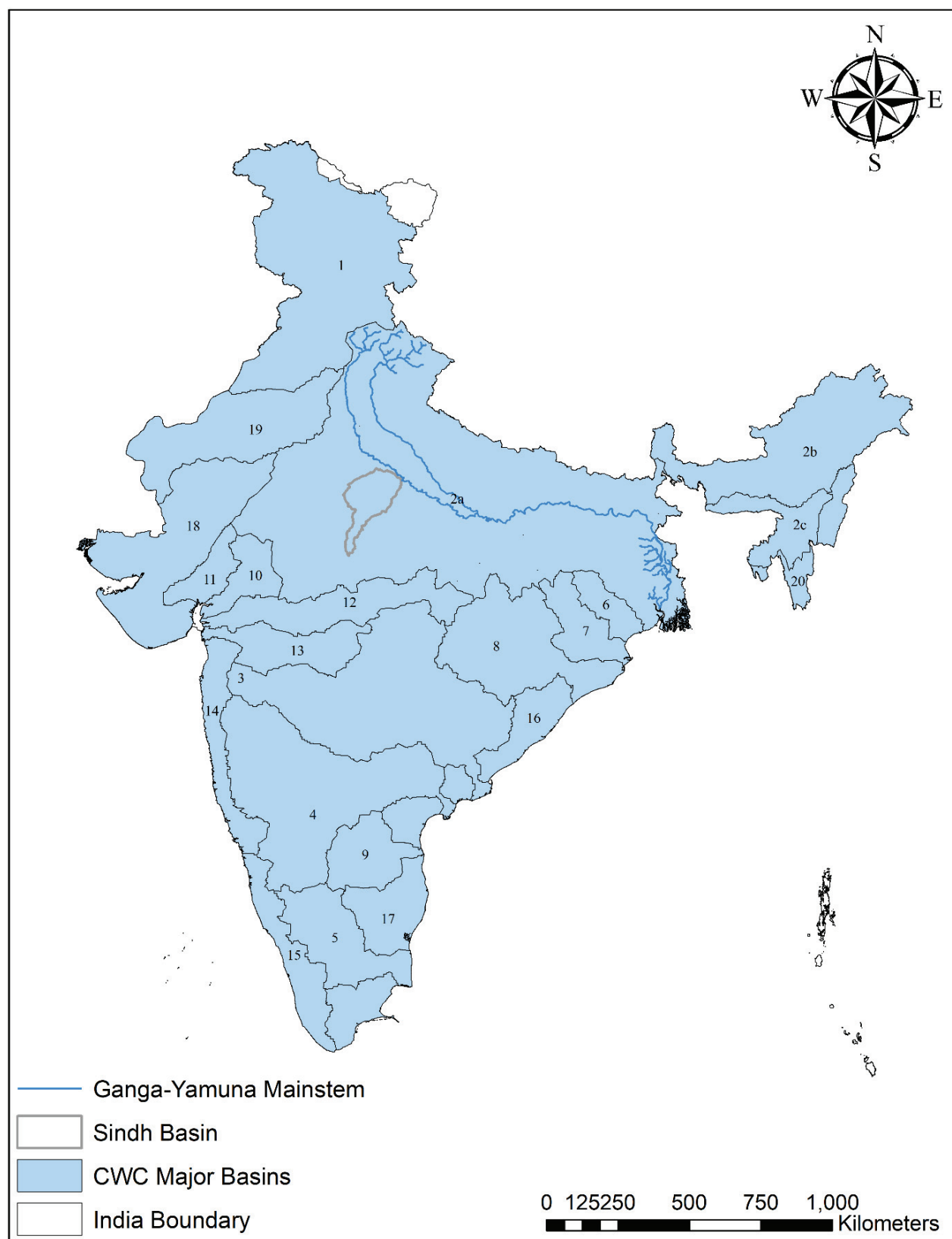
# SINDH BASIN: MAJOR BARRAGES AND WEIRS ON THE RIVER AND HER TRIBUTARIES

| S. No | District | Name            | Type    | River         | Nearest city | Status    | Comple-tion Year | Length (m) | Height upto Crest (m) | Purpose |
|-------|----------|-----------------|---------|---------------|--------------|-----------|------------------|------------|-----------------------|---------|
| 1     | Datia    | Angoori Barrage | Barrage | Angoori River | Datia        | Completed | 2004             | 82         | 5.1                   |         |
| 2     | Datia    | Bhutan Barrage  | Barrage | Barron Nadi   | Datia        | Completed | 2003             | 28         | 2.95                  |         |
| 3     | Gwalior  | Jalalpur Weir   | Weir    | Morar         | Gwalior      | Completed |                  |            |                       |         |
| 4     | Shivpuri | Samoha Weir     | Weir    | Mahuar        | Karera       | Completed |                  |            | 17                    |         |
| 5     | Shivpuri | Ukalia Anicut   | Anicut  | Sindh         | Karera       | Completed |                  | 518        |                       |         |

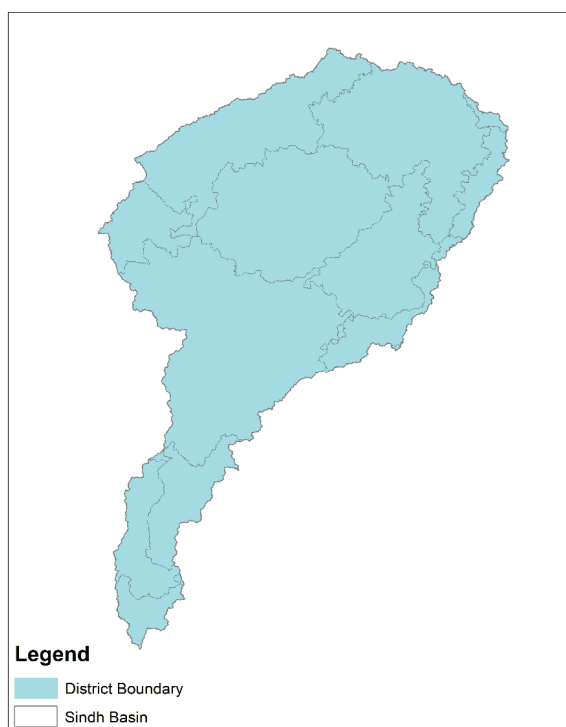
## CWC BASINS

| Basin Code | Basin Name                                            |
|------------|-------------------------------------------------------|
| 1          | Indus (Up to border)                                  |
| 2a         | Ganga                                                 |
| 2b         | Brahmaputra                                           |
| 2c         | Barak and others                                      |
| 3          | Godavari                                              |
| 4          | Krishna                                               |
| 5          | Cauvery                                               |
| 6          | Subernarekha                                          |
| 7          | Brahmani and Baitarni                                 |
| 8          | Mahanadi                                              |
| 9          | Pennar                                                |
| 10         | Mahi                                                  |
| 11         | Sabarmati                                             |
| 12         | Narmada                                               |
| 13         | Tapi                                                  |
| 14         | West flowing s from Tapi to Tadri                     |
| 15         | West flowing s from Tadri to Kanyakumari              |
| 16         | East flowing s between Mahanadi and Pennar            |
| 17         | East flowing s between Pennar and Kanyakumari         |
| 18         | West flowing s of Kutch and Saurashtra including Luni |
| 19         | Area of inland drainage in Rajasthan                  |
| 20         | Minors draining into Myanmar (Burma and Bangladesh)   |

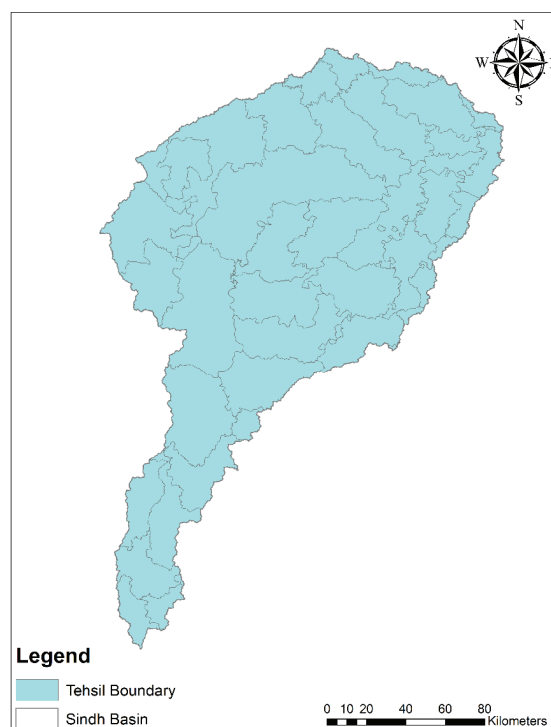
Source: River Basin Atlas of India, Ministry of Water Resources, GoI (October 2012)



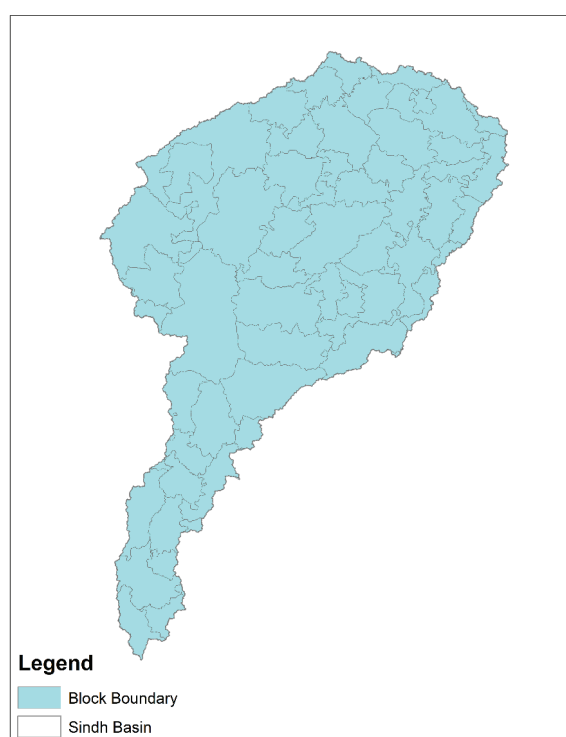
# SINDH BASIN: ADMINISTRATIVE STRUCTURE



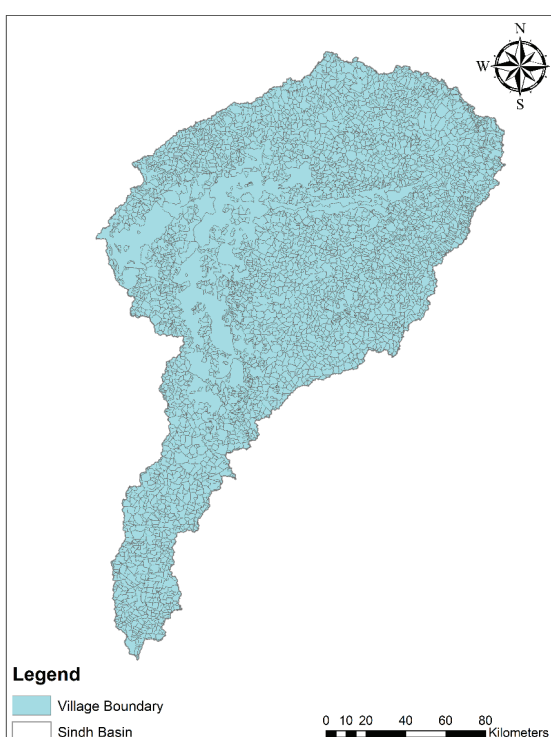
**District: UP – 04; MP - 10**



**Tehsil: UP – 08; MP - 35**



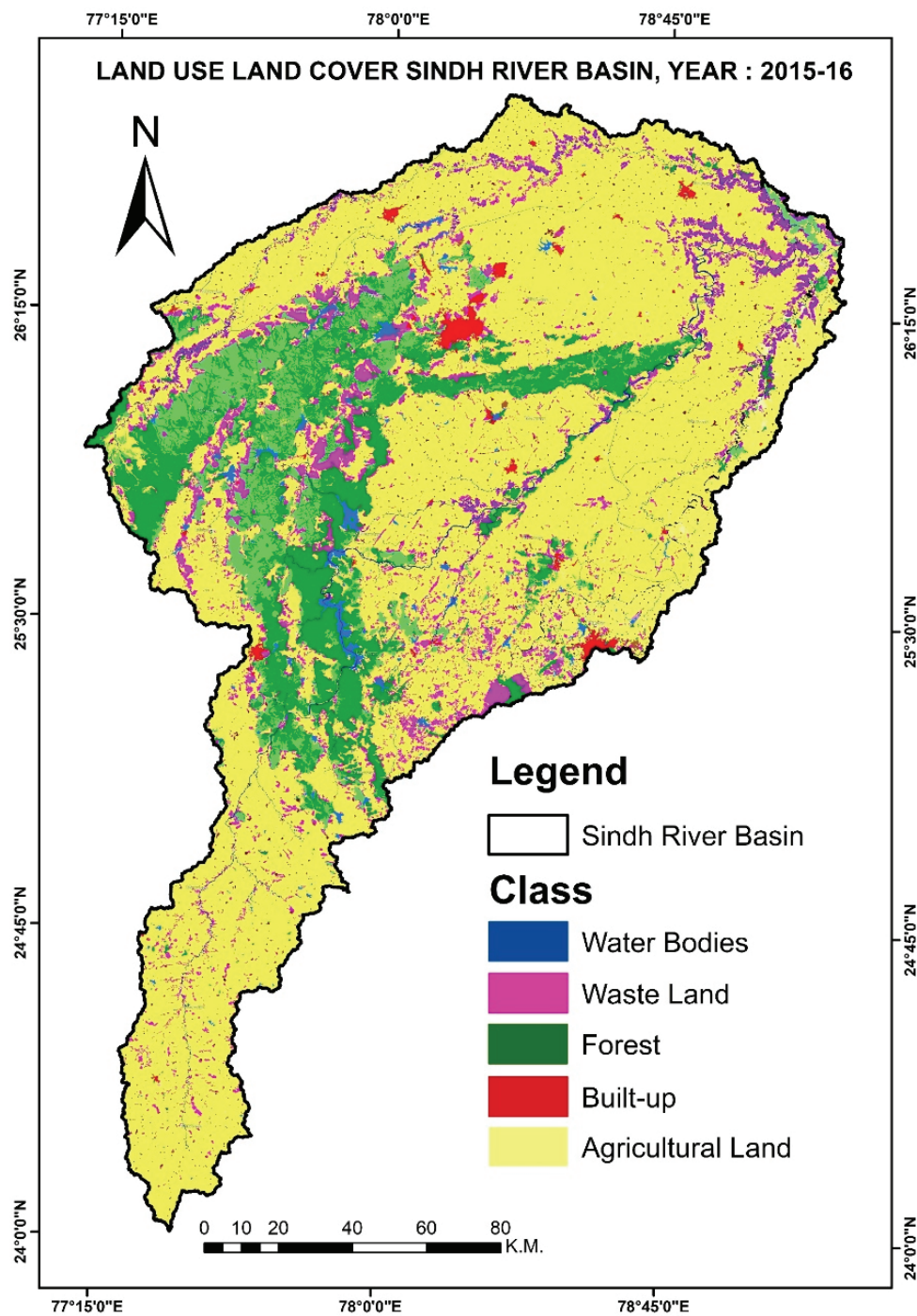
**Block: UP – 06; MP - 53**



**Villages: UP – 45; MP - 4,176**

Source: Survey of India

## PUNPUN BASIN: LAND USE LAND COVER [1:50K]

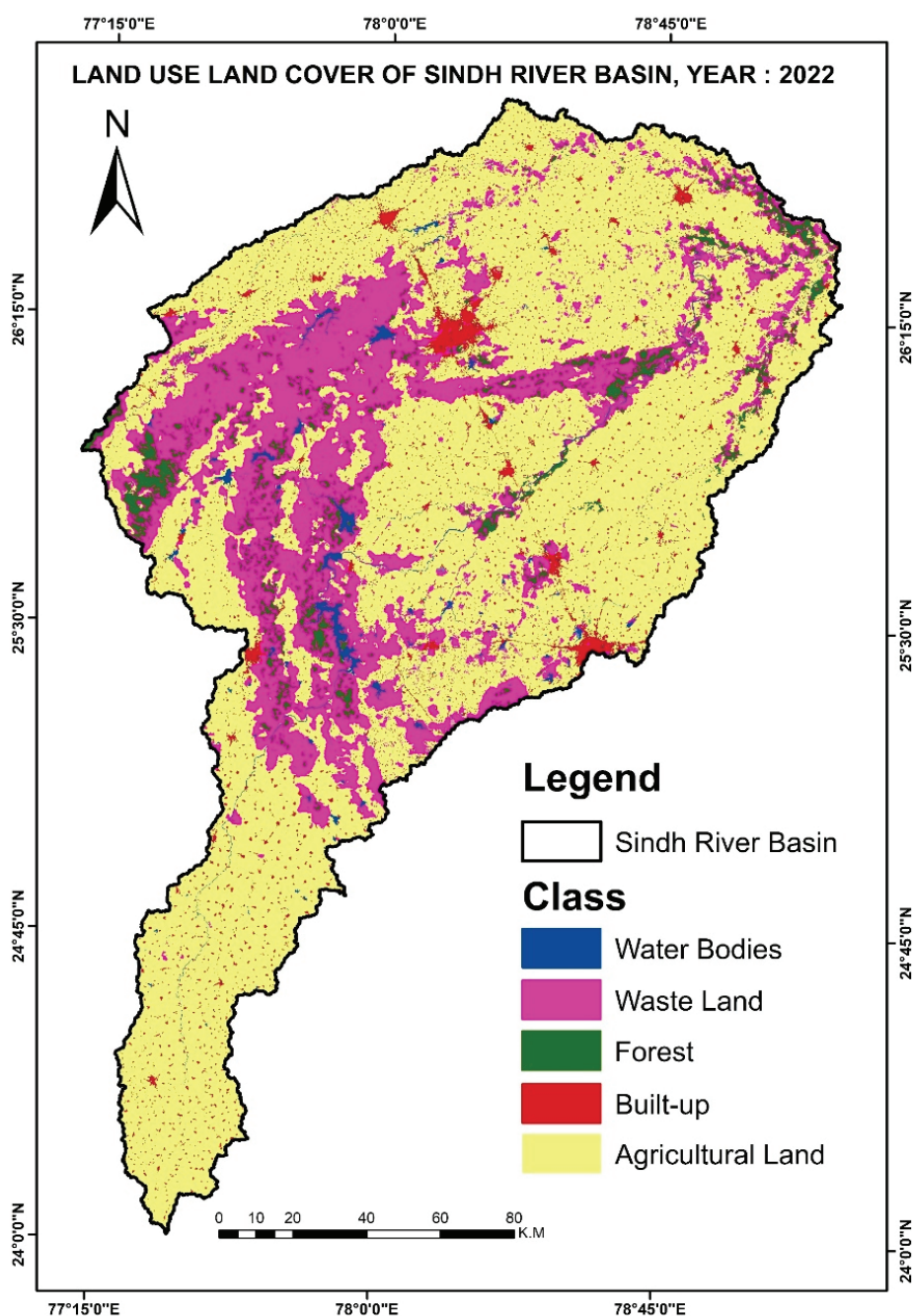


Imagery: Multi-temporal satellite data of 2015-16 from Resourcesat-2 LISS III, Year: 2015 -16

Accuracy: Overall accuracy of different LULC classes vary from 79% (like Agro-horticulture) to 97% (like waterbodies).

Source: NRSC

## PUNPUN BASIN: LAND USE LAND COVER [SENTINEL-2]



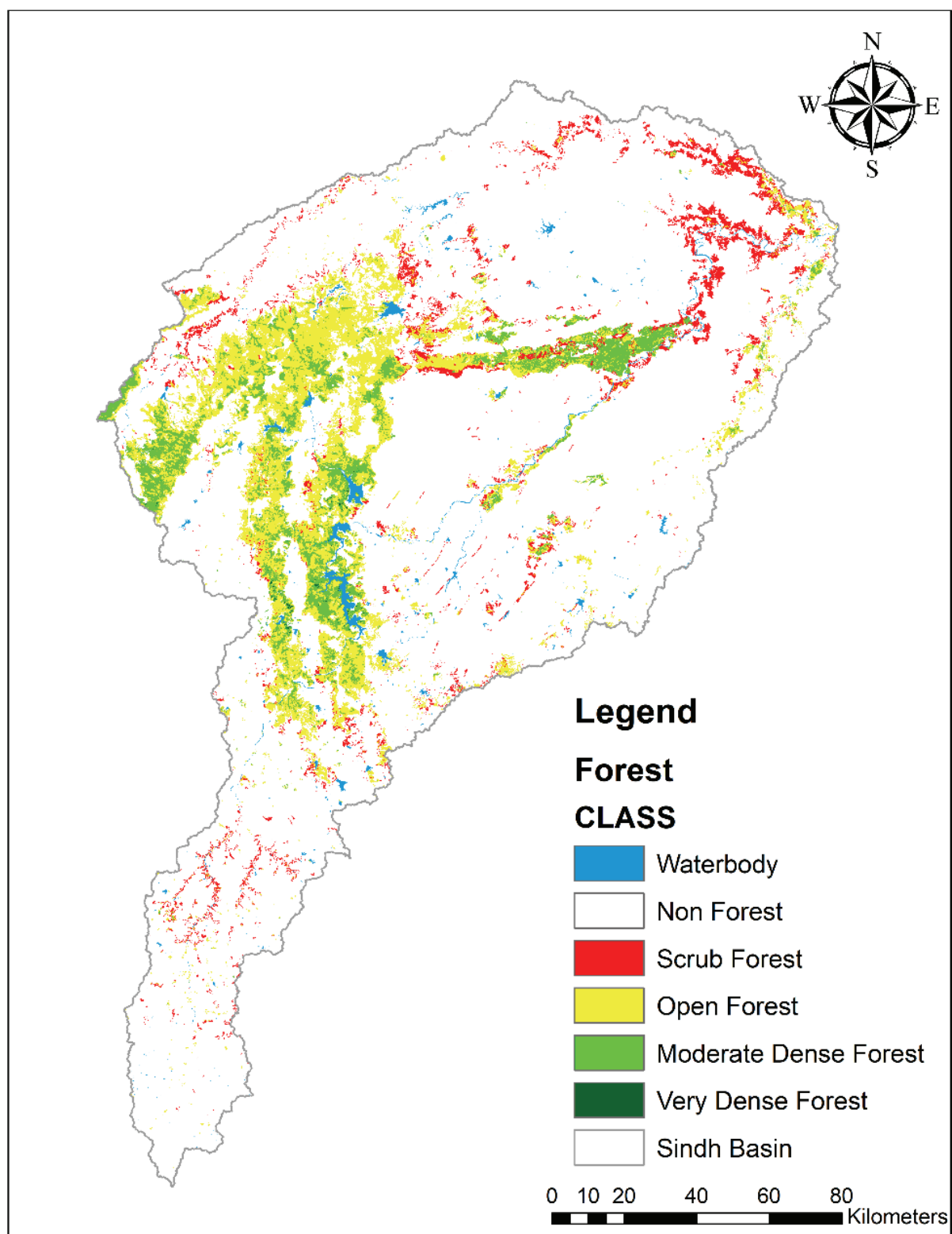
Imagery: Sentinel-2

Year: 2021

Accuracy: 85.96%

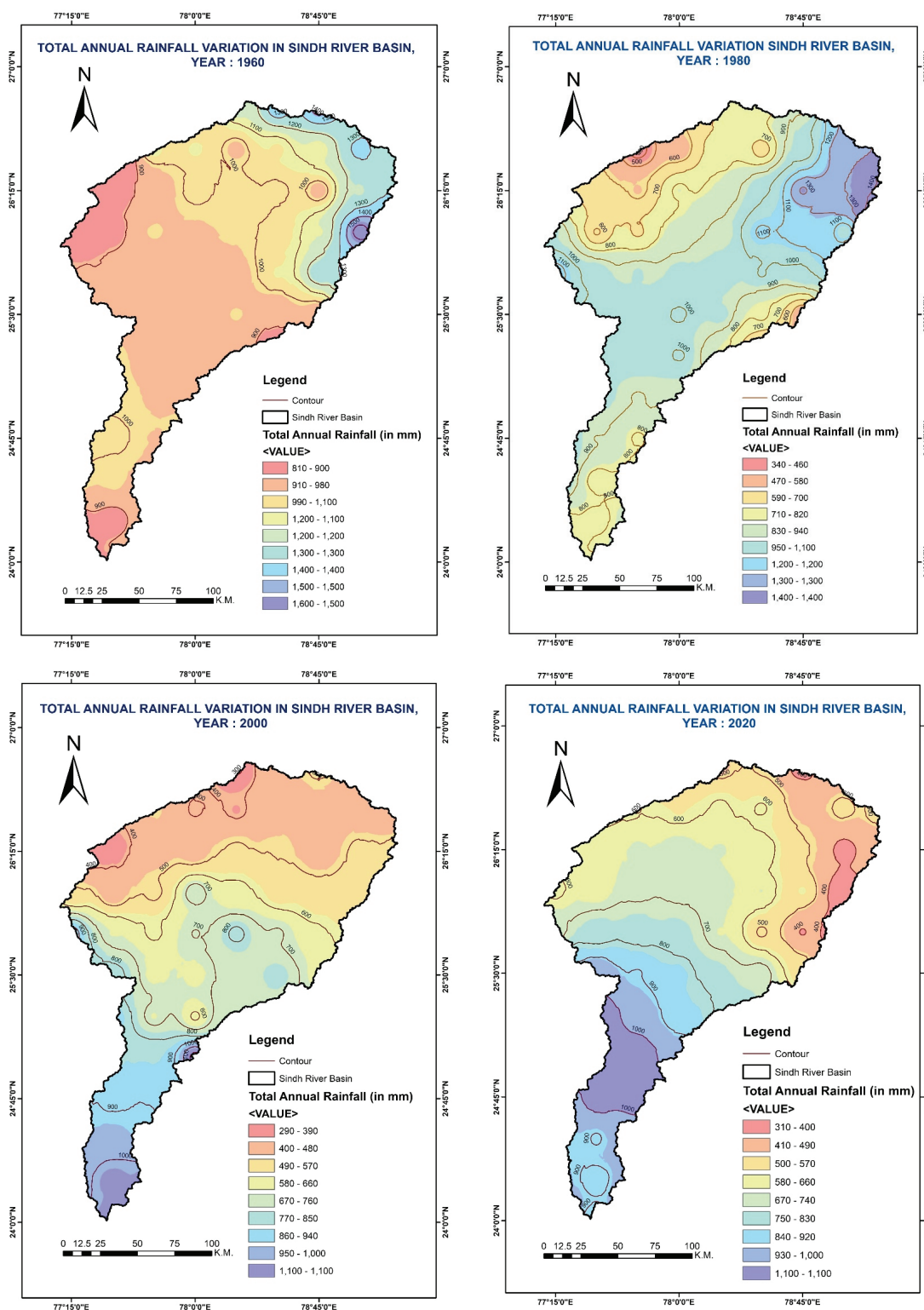
Source: ESRI

## SINDH BASIN: FOREST COVER



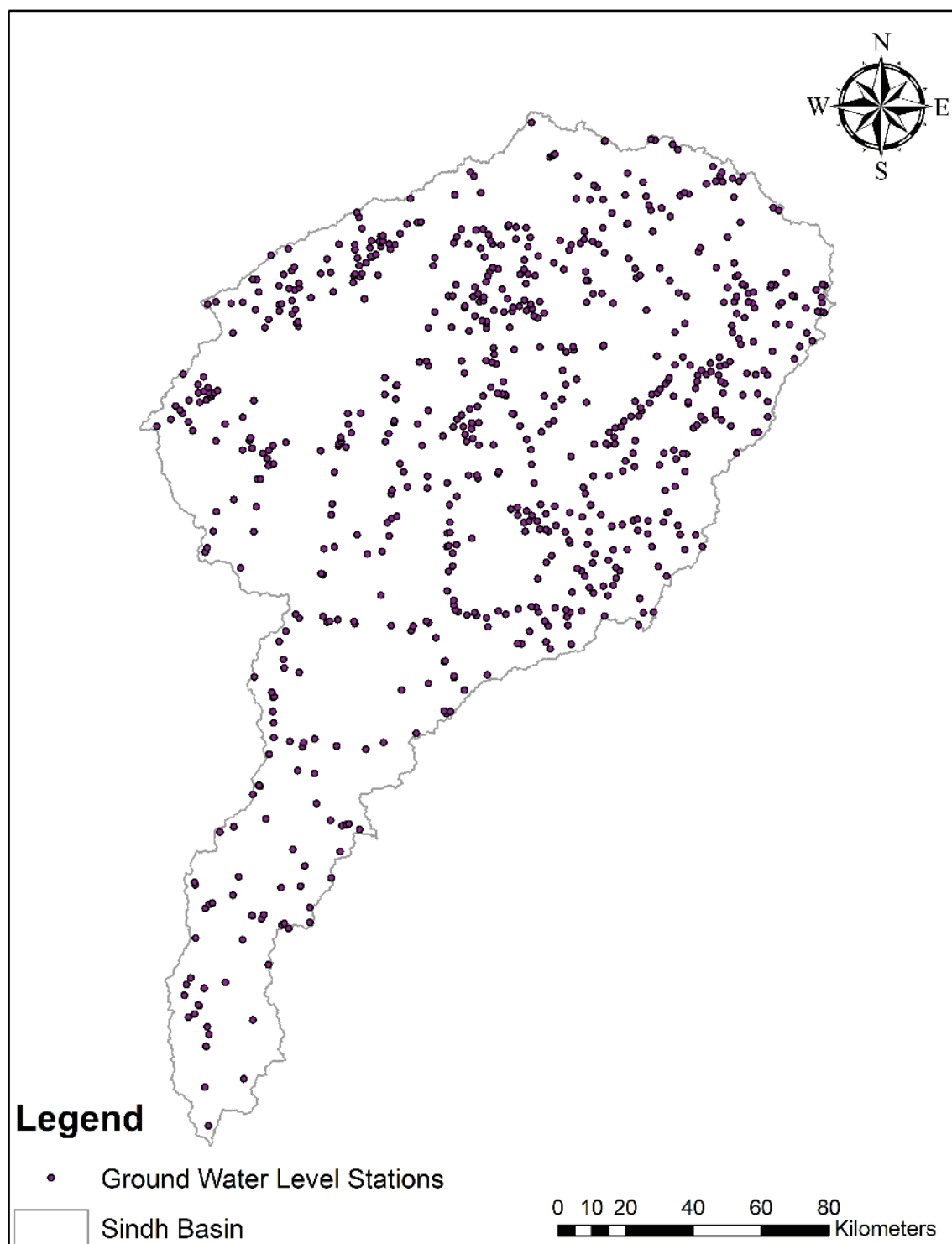
Source: Forest Survey of India, 2019

# SINDH BASIN: ANNUAL RAINFALL [1960 – 2020]

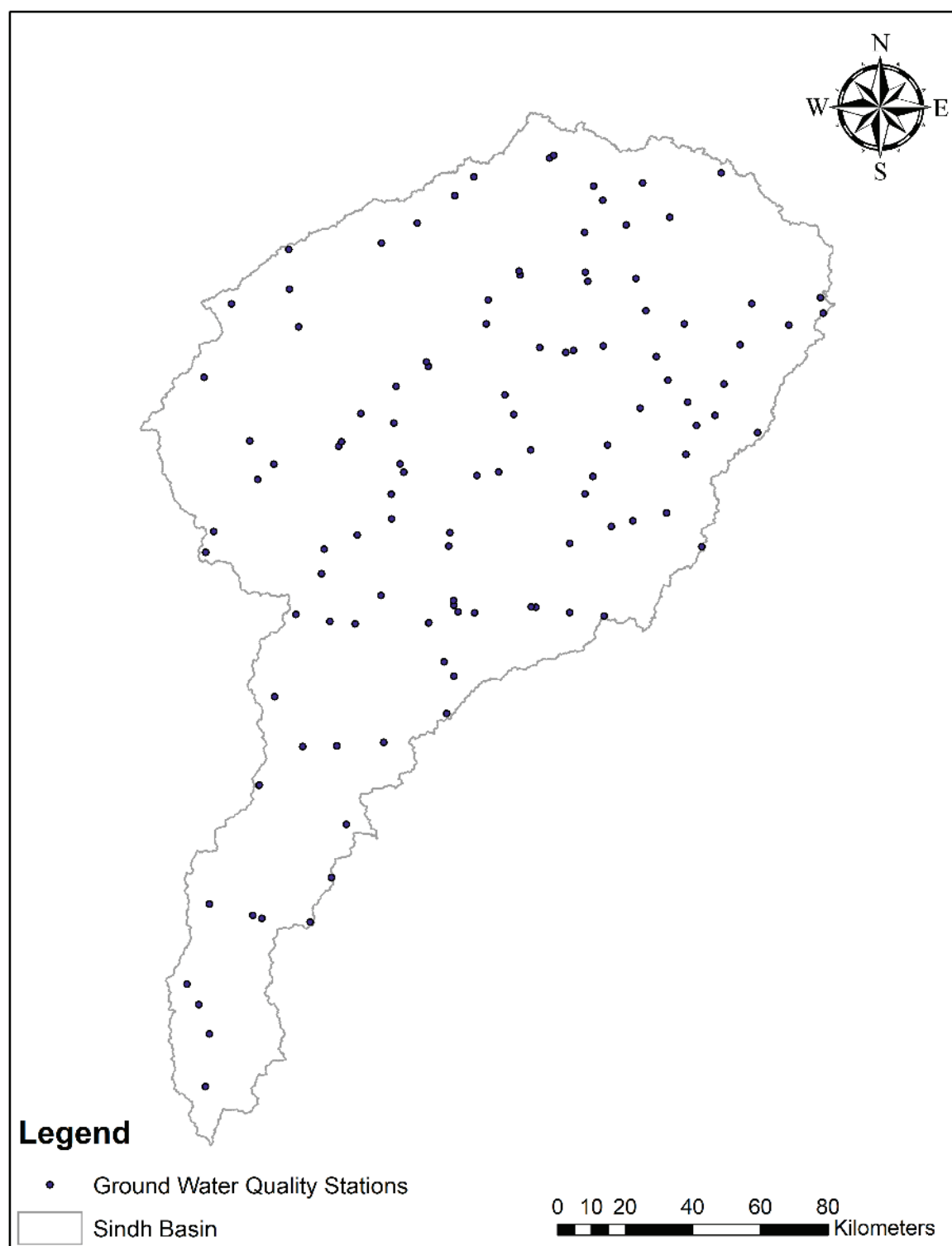


Source: IMD

## SINDH BASIN: GROUND WATER LEVEL AND QUALITY STATION

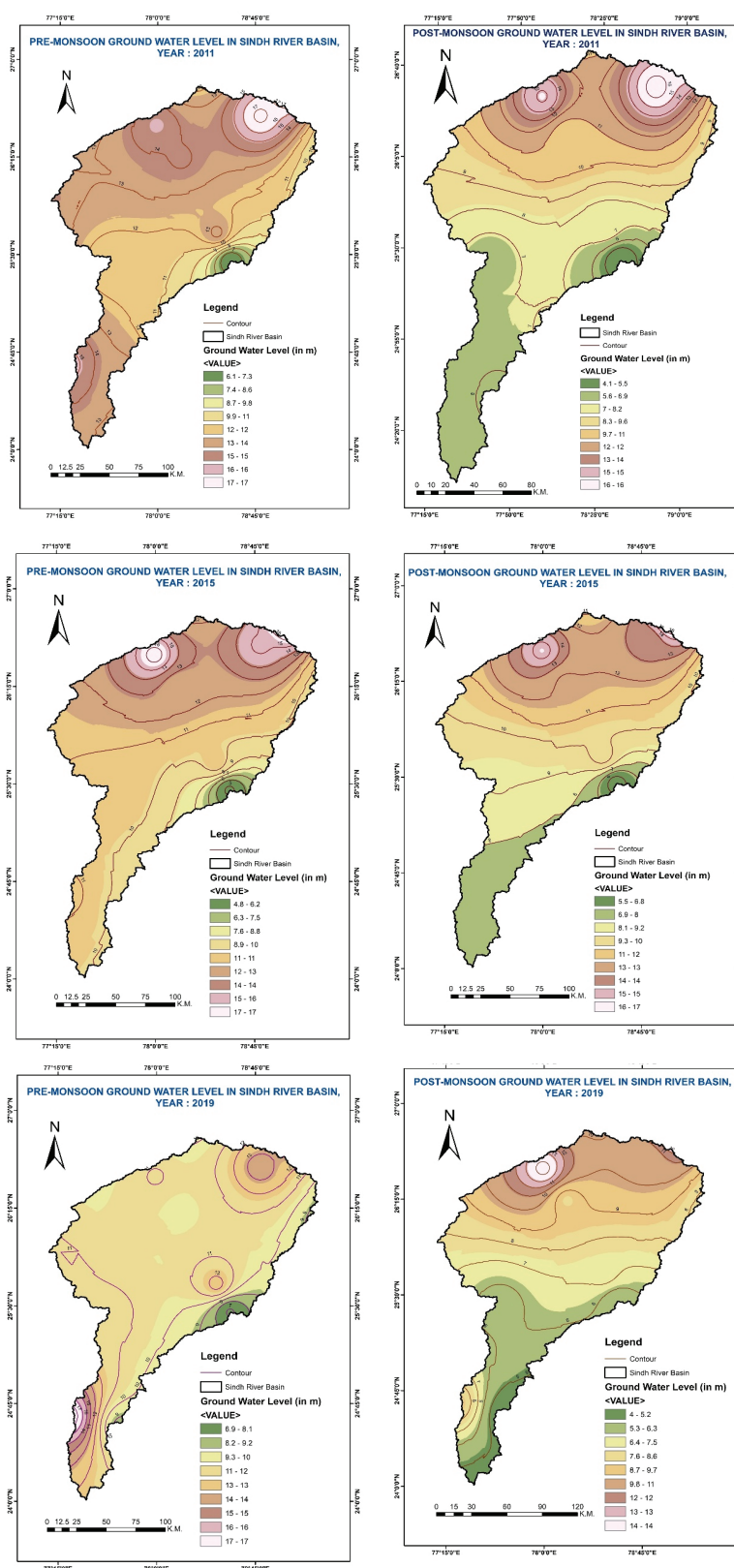


Source: NWIC



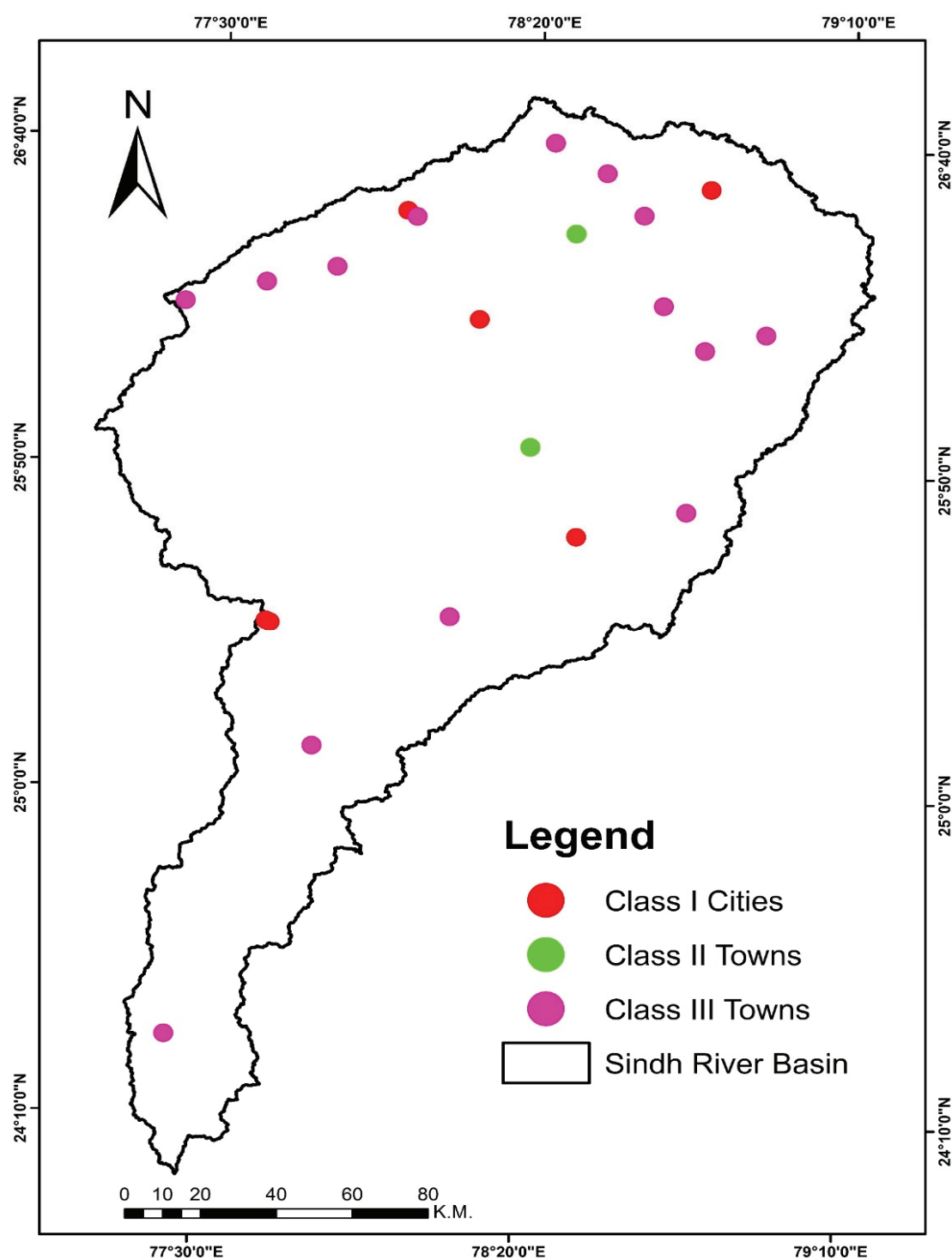
Source: NWIC

# SINDH BASIN: GROUND WATER LEVELS



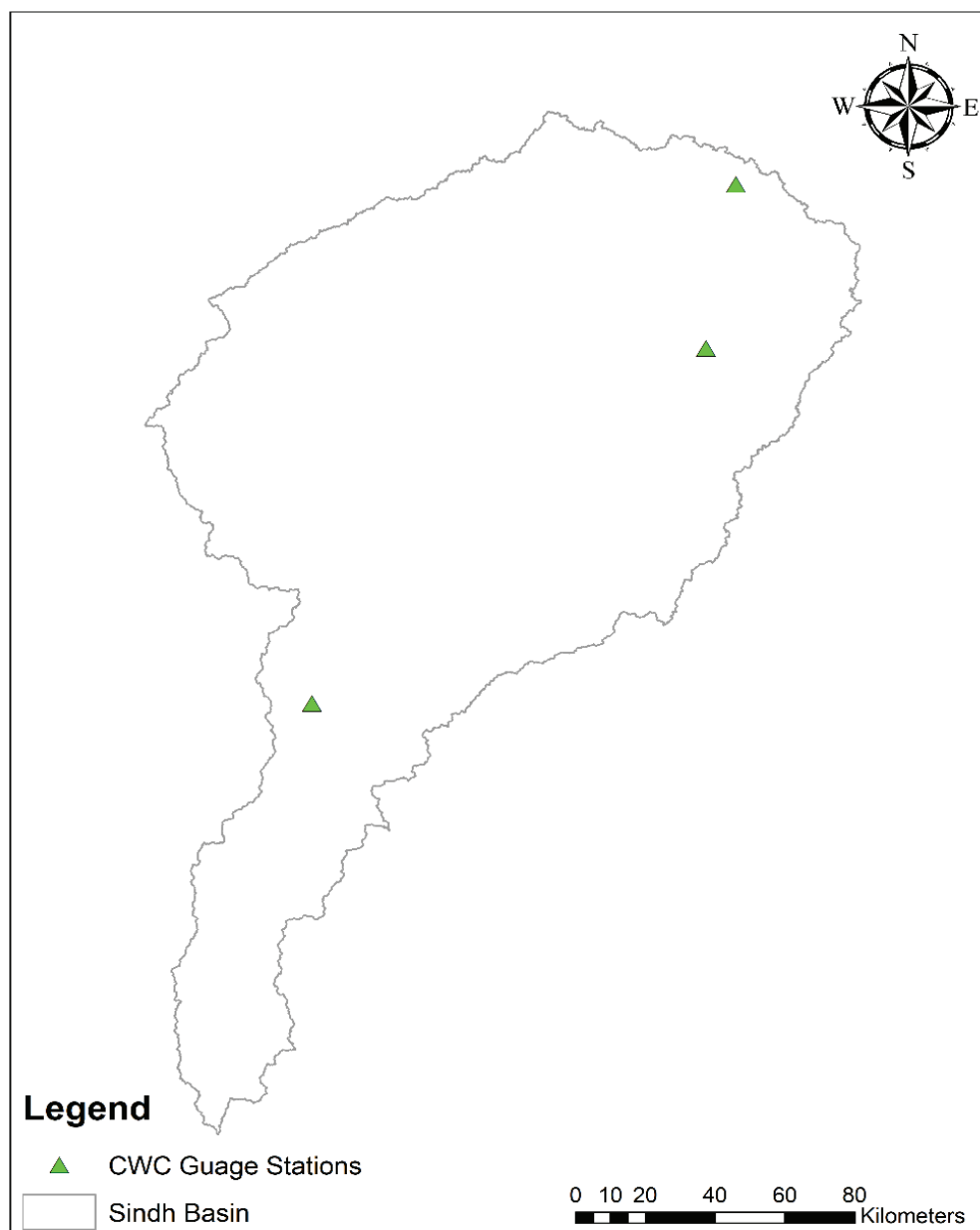
Source: CGWB

## SINDH BASIN: CLASS I, II AND III CITIES



05 Class I cities,  
02 Class II and 14 Class III towns  
Source: Census 2011

## SINDH BASIN: CWC SITE LOCATION

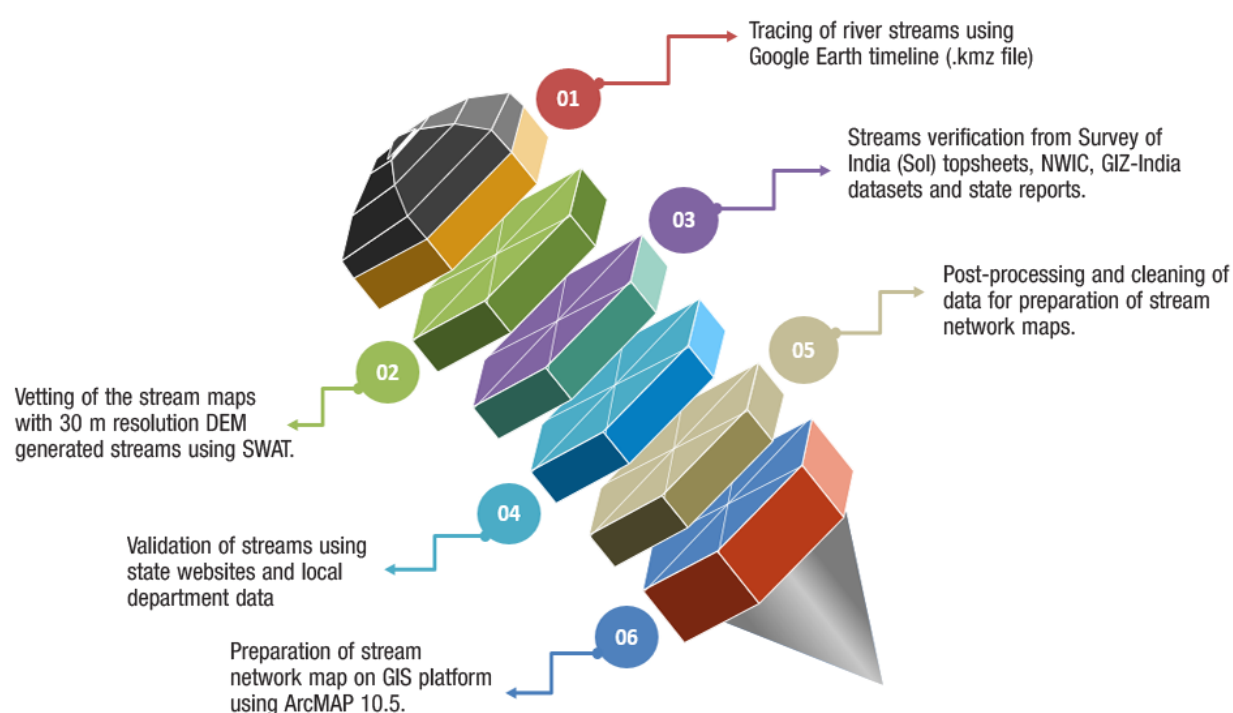


Source: CWC

| S No | Station Name | River             | District | Measurement Type | Data Available Since |
|------|--------------|-------------------|----------|------------------|----------------------|
| 1    | Bhind        | Ganga/Yamuna      | Bhind    | GD               | 18-11-1970           |
| 2    | Pachauli     | Ganga/Yamuna/Sind | Shivpuri | GDQ              | 04-11-1980           |
| 3    | Seondha      | Ganga/Yamuna/Sind | Datia    | GDSQ             | 18-09-1989           |

# RIVER NETWORK PREPARATION METHODOLOGY

The method adopted, in brief, to obtain the river network are stepwise as follows:

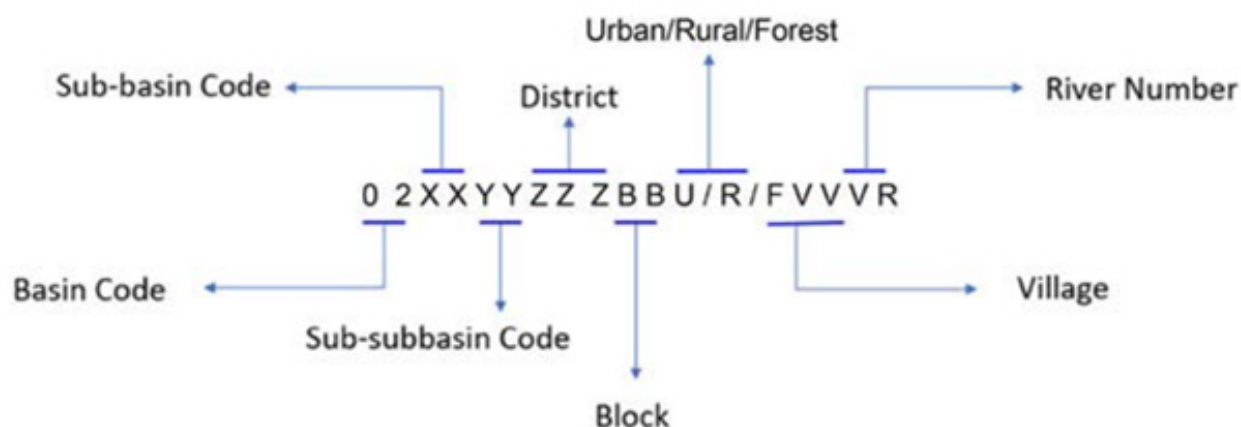


- Streams less than 2.5 km and coming from local agriculture land is not covered.
- All streams covered which are coming from populated area (Urban or Rural) even if they are less than 1 km. (if it is visible).

**Disclaimer:** The accuracies of the maps generated by the above method are subject to the limitations of the data processing tools and software used for the particular geographical regions as represented in Google Earth images, and are subject to future refinement.

## RIVER CODIFICATION SYSTEM

In the present Atlas alphanumeric characters are used for coding the river systems. A combination of natural and administrative boundaries is used to assign a code to each river. Each sub-step in the codification system is assigned a digit that indicates the length of the code up to that point, and the total length of the code is 16 digits.



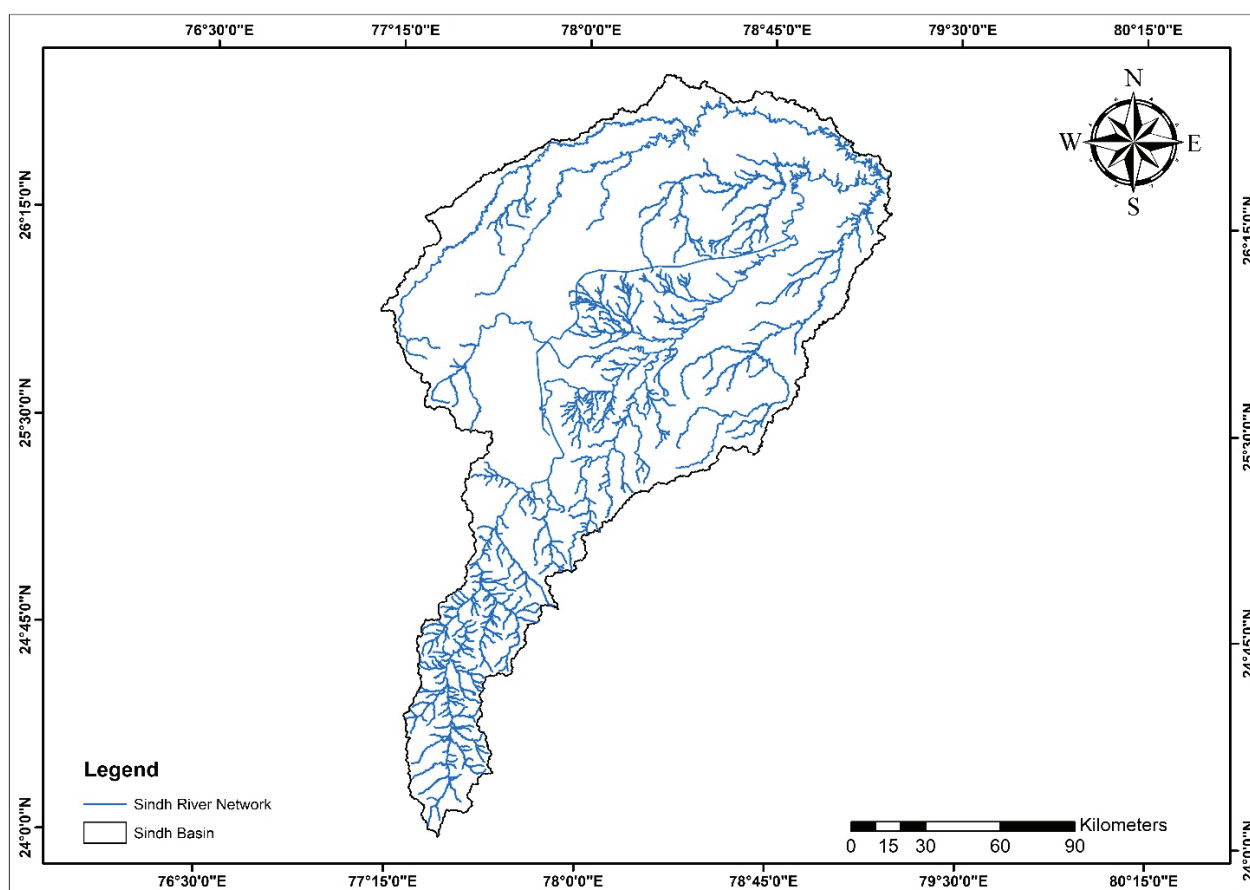
The first two digits represent the code for the major basin, according to the code system proposed by the Central Water Commission (CWC), Government of India. The following four digits indicate the sub-basins and sub-subbasins, in the order of the rivers. The district code is represented by the next three digits and is based on the 2011 census data. The administrative boundaries will be determined based on the source of the river. The next two digits represent the block code, which is taken from the district website and uses the same serial numbering system. The next character, 'U', 'R' or 'F' indicates whether the river is located in an urban, rural or forest area. The next three digits represent the code for the village, based on census data from 2011, and uses the same serial numbering system as provided on the census data but the number will be given based on block. The final digit indicates the number of the river that originates from the specific administrative boundary.

# SINDH BASIN AND ITS RIVER NETWORK

Area: 9472.66 Sq. Km

Number of Rivers - 114

River Network – 2544.34 Km



# SINDH BASIN AND ITS RIVER NETWORK



Sindh River UID Code:

Basin Area: 27,860 Sq Km

Number of Rivers: 554

River Network: 7909.20 Km

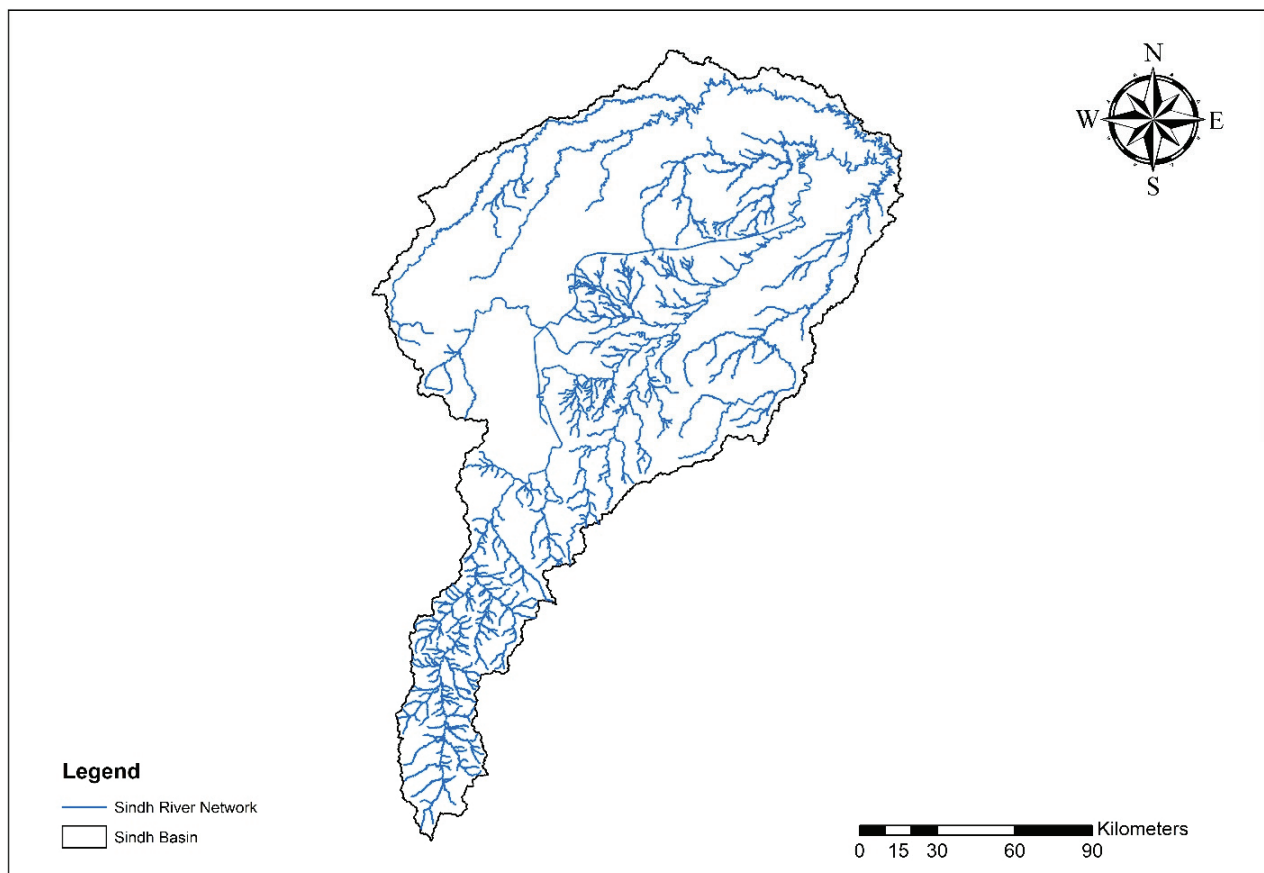
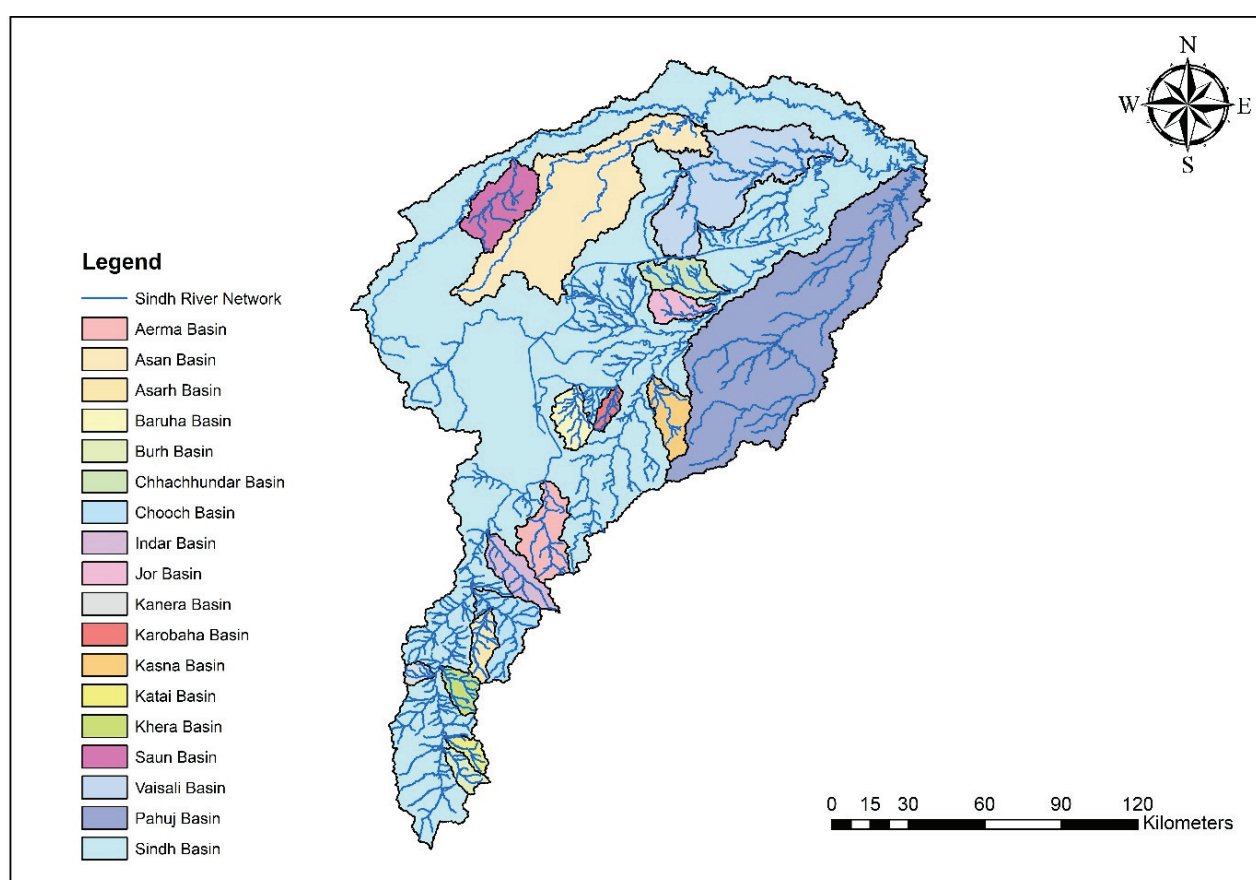


Figure: Sindh River Network

## SINDH BASIN: MAJOR SUB-BASINS

Major sub-basins of Sindh River Basin are as follows:

- |               |                      |                  |                  |
|---------------|----------------------|------------------|------------------|
| ■ Aerma Basin | ■ Asan Basin         | ■ Asarh Basin    | ■ Baruha Basin   |
| ■ Burh Basin  | ■ Chhachhundar Basin | ■ Chooch Basin   | ■ Indar Basin    |
| ■ Jor Basin   | ■ Kanera Basin       | ■ Karobaha Basin | ■ Kasna Basin    |
| ■ Katai Basin | ■ Khera Basin        | ■ Saun Basin     | ■ Vaishali Basin |
| ■ Pahuj Basin |                      |                  |                  |



# SINDH RIVER MAINSTEM FLOW DIAGRAM

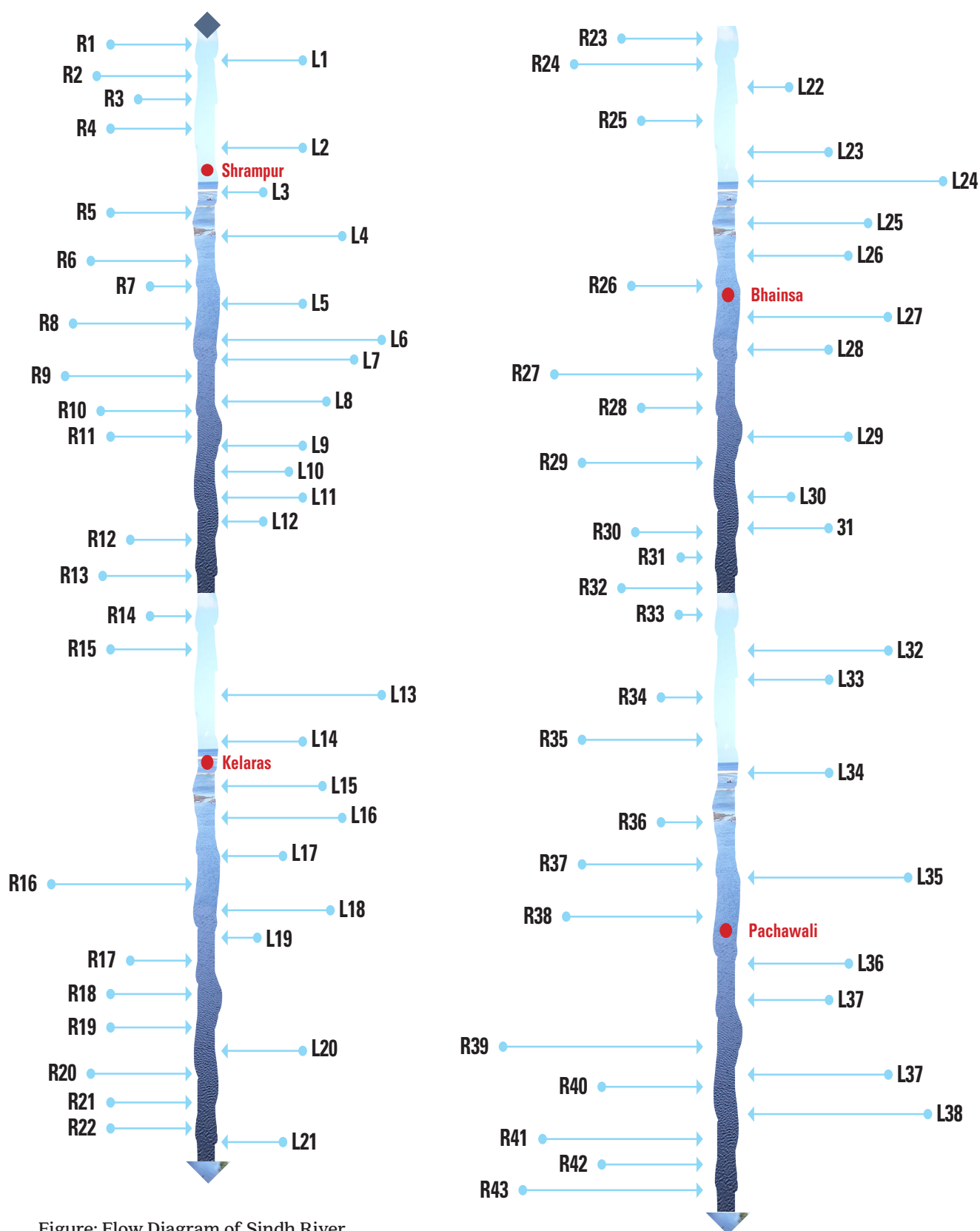


Figure: Flow Diagram of Sindh River

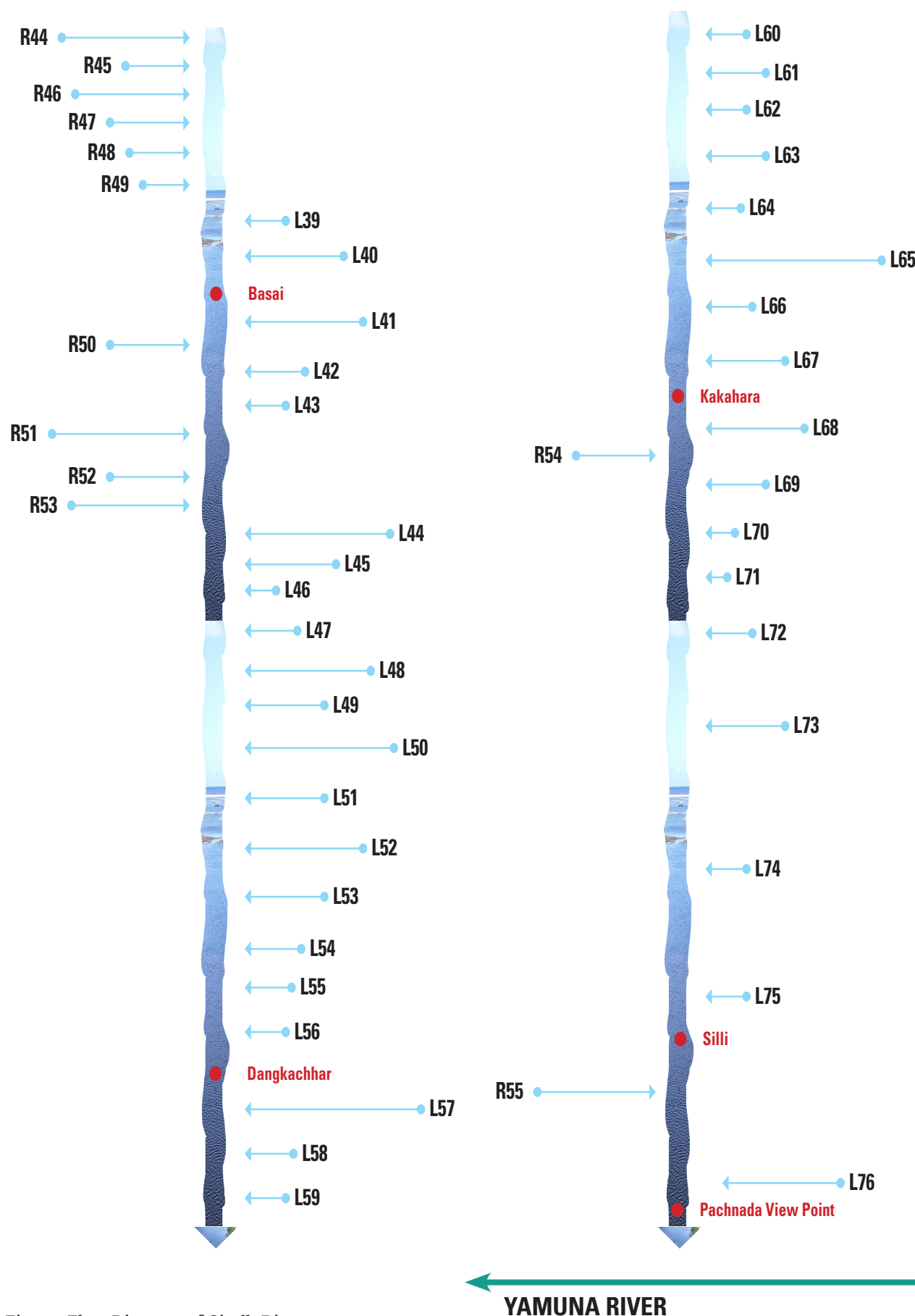


Figure: Flow Diagram of Sindh River

| SINDH RIVER MAINSTEM FLOW DIAGRAM |              |                 |                     |                        |       |                           |
|-----------------------------------|--------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                             | River Name   | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                   |              |                 |                     | Lat                    | Long  |                           |
| 1                                 | Stream 89    | R 1             | 11.2                | 24.13                  | 77.46 | 17                        |
| 2                                 | Stream 88    | L 1             | 6.95                | 24.14                  | 77.46 | 20                        |
| 3                                 | Stream 87    | R 2             | 15.7                | 24.21                  | 77.51 | 34                        |
| 4                                 | Stream 86    | R 3             | 5.25                | 24.22                  | 77.51 | 36                        |
| 5                                 | Stream 90    | R 4             | 9.54                | 24.23                  | 77.50 | 38                        |
| 6                                 | Stream 85    | L 2             | 25.3                | 24.23                  | 77.50 | 39                        |
| 7                                 | Stream 84    | L 3             | 1.81                | 24.27                  | 77.49 | 44                        |
| 8                                 | Stream 84b   | R 5             | 7.62                | 24.27                  | 77.50 | 45                        |
| 9                                 | Stream 84a   | L 4             | 28.3                | 24.28                  | 77.49 | 46                        |
| 10                                | Stream 91    | R 6             | 8.43                | 24.29                  | 77.49 | 47                        |
| 11                                | Stream 92    | R 7             | 4.25                | 24.31                  | 77.50 | 50                        |
| 12                                | Stream 83    | L 5             | 4.47                | 24.32                  | 77.50 | 52                        |
| 13                                | Burh Nadi    | R 8             | 31.5                | 24.37                  | 77.50 | 58                        |
| 14                                | Stream 82    | L 6             | 35.9                | 24.37                  | 77.50 | 58                        |
| 15                                | Stream 81a   | L 7             | 16                  | 24.38                  | 24.38 | 60                        |
| 16                                | Katai Nala   | R 9             | 34.4                | 24.41                  | 77.51 | 64                        |
| 17                                | Stream 81    | L 8             | 11.5                | 24.42                  | 77.50 | 66                        |
| 18                                | Stream 80    | R 10            | 20.7                | 24.43                  | 77.51 | 68                        |
| 19                                | Patwa Nala   | R 11            | 14.3                | 24.45                  | 77.51 | 70                        |
| 20                                | Stream 79    | L 9             | 6.61                | 24.47                  | 77.50 | 73                        |
| 21                                | Stream 78    | L 10            | 7                   | 24.48                  | 77.49 | 75                        |
| 22                                | Stream 77    | L 11            | 5                   | 24.50                  | 77.49 | 77                        |
| 23                                | Stream 78    | L 12            | 1.12                | 24.50                  | 77.49 | 78                        |
| 24                                | Stream 79    | R 12            | 7                   | 24.50                  | 77.49 | 78                        |
| 25                                | Stream 94    | R 13            | 12.5                | 24.52                  | 77.49 | 81                        |
| 26                                | Stream 95    | R 14            | 4.6                 | 24.54                  | 77.49 | 83                        |
| 27                                | Stream 96    | R 15            | 6.75                | 24.55                  | 77.49 | 85                        |
| 28                                | Senduwa Nadi | L 13            | 40.9                | 24.57                  | 24.57 | 87                        |
| 29                                | Stream 75    | L 14            | 8.38                | 24.59                  | 77.48 | 89                        |
| 30                                | Khod Ka Nala | L 15            | 10.1                | 24.61                  | 77.48 | 91                        |
| 31                                | Kanera Nadi  | L 16            | 15.7                | 24.63                  | 77.48 | 94                        |
| 32                                | Stream 74    | L 17            | 4.1                 | 24.65                  | 77.49 | 97                        |
| 33                                | Khera Nadi   | R 16            | 40                  | 24.66                  | 77.49 | 98                        |
| 34                                | Ghura Nala   | L 18            | 8.24                | 24.67                  | 77.50 | 99                        |

| SINDH RIVER MAINSTEM FLOW DIAGRAM |                  |                 |                     |                        |       |                           |
|-----------------------------------|------------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                             | River Name       | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                   |                  |                 |                     | Lat                    | Long  |                           |
| 35                                | Stream 73        | L 19            | 2.76                | 24.68                  | 77.51 | 101                       |
| 36                                | Stream 72        | R 17            | 5.29                | 24.69                  | 77.53 | 104                       |
| 37                                | Stream 71        | R 18            | 9.67                | 24.69                  | 77.54 | 405                       |
| 38                                | Stream 70        | R 19            | 8.84                | 24.70                  | 77.54 | 106                       |
| 39                                | Stream 69        | L 20            | 8.48                | 24.71                  | 77.54 | 106                       |
| 40                                | Stream 68        | R 20            | 7.27                | 24.71                  | 77.54 | 107                       |
| 41                                | Stream 67        | R 21            | 4.59                | 24.73                  | 77.56 | 109                       |
| 42                                | Stream 66        | R 22            | 2.55                | 24.74                  | 77.56 | 111                       |
| 43                                | Stream 97        | L 21            | 5.33                | 24.75                  | 77.55 | 112                       |
| 44                                | Stream 64        | R 23            | 7.87                | 24.76                  | 77.56 | 114                       |
| 45                                | Stream 65        | R 24            | 8.26                | 24.77                  | 77.55 | 115                       |
| 46                                | Stream 98        | L 22            | 9.48                | 24.78                  | 77.54 | 117                       |
| 47                                | Stream 63        | R 25            | 6.27                | 24.78                  | 77.55 | 117                       |
| 48                                | Niwari Nadi      | L 23            | 33                  | 24.82                  | 77.52 | 123                       |
| 49                                | Piriya Nala      | L 24            | 9.6                 | 24.82                  | 77.47 | 125                       |
| 50                                | Panha Jharo Nala | L 25            | 10                  | 24.86                  | 77.55 | 129                       |
| 51                                | Dharma Jaro Nala | L 26            | 9.5                 | 24.87                  | 77.56 | 131                       |
| 52                                | Motiya Nala      | R 26            | 13.6                | 24.88                  | 77.58 | 133                       |
| 53                                | Stream 59        | L 27            | 2.57                | 24.89                  | 77.59 | 134                       |
| 54                                | Umarwaro Nala    | L 28            | 3.36                | 24.90                  | 77.59 | 135                       |
| 55                                | Chooch Nadi      | R 27            | 71                  | 24.93                  | 77.61 | 140                       |
| 56                                | Baseri Nadi      | R 28            | 18.5                | 24.94                  | 77.61 | 141                       |
| 57                                | Stream 99        | L 29            | 7.45                | 24.95                  | 77.61 | 142                       |
| 58                                | Sukha Jharo Nala | R 29            | 7.64                | 24.95                  | 77.61 | 143                       |
| 59                                | Stream 56        | L 30            | 1.67                | 24.95                  | 77.61 | 143                       |
| 60                                | Stream 55        | L 31            | 8.7                 | 24.97                  | 77.61 | 144                       |
| 61                                | Stream 54        | R 30            | 8.23                | 24.97                  | 77.61 | 145                       |
| 62                                | Stream 53        | R 31            | 1.27                | 24.98                  | 77.61 | 145                       |
| 63                                | Stream 52        | R 32            | 0.41                | 24.99                  | 77.60 | 147                       |
| 64                                | Stream 51        | R 33            | 1.76                | 25.00                  | 25.00 | 149                       |
| 65                                | Stream 50        | L 32            | 5.25                | 25.00                  | 77.59 | 150                       |
| 66                                | Stream 49        | L 33            | 3.69                | 25.00                  | 77.59 | 150                       |

| SINDH RIVER MAINSTEM FLOW DIAGRAM |                            |                 |                     |                        |       |                           |
|-----------------------------------|----------------------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                             | River Name                 | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                   |                            |                 |                     | Lat                    | Long  |                           |
| 67                                | Stream 48                  | R 34            | 0.57                | 25.04                  | 77.61 | 155                       |
| 68                                | Stream 47                  | R 35            | 8.57                | 25.04                  | 77.62 | 155                       |
| 69                                | Stream 46                  | L 34            | 2.34                | 25.05                  | 77.62 | 157                       |
| 70                                | Stream 45                  | R 36            | 1.33                | 25.05                  | 77.62 | 157                       |
| 71                                | Stream 42                  | R 37            | 5.29                | 25.08                  | 77.63 | 160                       |
| 72                                | Stream 41                  | L 35            | 8.78                | 25.09                  | 77.63 | 161                       |
| 73                                | Stream 44                  | R 38            | 4.17                | 25.09                  | 77.64 | 162                       |
| 74                                | Stream 43                  | L 36            | 3.18                | 25.12                  | 77.65 | 165                       |
| 75                                | Ghonchi Nala               | L 37            | 12.3                | 25.12                  | 77.65 | 166                       |
| 76                                | Indar Nadi                 | R 39            | 54.6                | 25.13                  | 77.66 | 167                       |
| 77                                | Stream 38                  | R 40            | 8.55                | 25.17                  | 77.68 | 173                       |
| 78                                | Khirai Nala                | L 38            | 24.6                | 25.28                  | 77.75 | 188                       |
| 79                                | Badhai Nadi                | R 41            | 17.3                | 25.26                  | 77.80 | 193                       |
| 80                                | Stream 37                  | R 42            | 10.8                | 25.27                  | 77.81 | 194                       |
| 81                                | Aerma Nala                 | R 43            | 53.3                | 25.31                  | 77.86 | 204                       |
| 82                                | Baruha Nadi                | R 44            | 28.9                | 25.64                  | 77.98 | 271                       |
| 83                                | Stream 35                  | R 45            | 6.12                | 25.64                  | 78.03 | 277                       |
| 84                                | Dundai Nadi                | R 46            | 15.8                | 25.64                  | 78.03 | 277                       |
| 85                                | Sukdeni Nala               | R 47            | 11.7                | 25.64                  | 78.07 | 281                       |
| 86                                | Stream 32                  | R 48            | 6.21                | 25.64                  | 78.10 | 284                       |
| 87                                | Karobaha Nadi              | R 49            | 27.3                | 25.64                  | 78.12 | 286                       |
| 88                                | Stream 31                  | L 39            | 1.66                | 25.66                  | 78.12 | 288                       |
| 89                                | Stream 29                  | L 40            | 13.4                | 25.70                  | 78.14 | 294                       |
| 90                                | Strteam 30                 | L 41            | 16.1                | 25.72                  | 78.16 | 297                       |
| 91                                | Stream 28a                 | L 42            | 12.5                | 25.74                  | 78.18 | 300                       |
| 92                                | Stream 28b                 | R 50            | 12                  | 25.73                  | 78.21 | 303                       |
| 93                                | Stream 28                  | L 43            | 5.99                | 25.76                  | 78.22 | 306                       |
| 94                                | Parbati Nadi               | L 44            | 166                 | 25.78                  | 78.26 | 311                       |
| 95                                | Mahuar Nadi                | R 51            | 130                 | 25.78                  | 78.30 | 315                       |
| 96                                | Stream 27                  | R 52            | 5.93                | 25.79                  | 78.34 | 320                       |
| 97                                | Sonya Nala<br>(Somia Nala) | R 53            | 36.3                | 25.80                  | 78.35 | 320                       |
| 98                                | Non River                  | L 45            | 66.5                | 25.83                  | 78.36 | 326                       |
| 99                                | Stream 26                  | L 46            | 1.85                | 25.86                  | 78.40 | 332                       |

| SINDH RIVER MAINSTEM FLOW DIAGRAM |                   |                 |                     |                        |       |                           |
|-----------------------------------|-------------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                             | River Name        | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                   |                   |                 |                     | Lat                    | Long  |                           |
| 100                               | Stream 25         | L 47            | 9.5                 | 25.87                  | 78.41 | 333                       |
| 101                               | Jor Nala          | L 48            | 33.9                | 25.92                  | 78.47 | 342                       |
| 102                               | Parwav Nala       | L 49            | 8.49                | 25.95                  | 78.48 | 347                       |
| 103                               | Chhachhundar Nadi | L 50            | 42.2                | 25.97                  | 78.51 | 351                       |
| 104                               | Stream 19         | L 51            | 8.87                | 25.98                  | 78.54 | 355                       |
| 105                               | Stream 20a        | L 52            | 12.3                | 26.03                  | 78.59 | 363                       |
| 106                               | Stream 20         | L 53            | 6.65                | 26.07                  | 78.63 | 372                       |
| 107                               | Stream 21         | L 54            | 5.8                 | 26.09                  | 78.64 | 374                       |
| 108                               | Stream 23         | L 55            | 5.4                 | 26.11                  | 78.69 | 380                       |
| 109                               | Stream 22         | L 56            | 5.21                | 26.13                  | 78.71 | 385                       |
| 110                               | Stream 18         | L 57            | 162                 | 26.21                  | 78.81 | 412                       |
| 111                               | Stream 17         | L 58            | 6.59                | 26.27                  | 78.82 | 423.3                     |
| 112                               | Stream 16         | L 59            | 2.67                | 26.40                  | 78.83 | 448.8                     |
| 113                               | Stream 15         | L 60            | 2.87                | 26.42                  | 78.82 | 455.6                     |
| 114                               | Stream 14         | L 61            | 3.78                | 26.43                  | 78.82 | 456.2                     |
| 115                               | Stream 13         | L 62            | 2.18                | 26.43                  | 78.84 | 458                       |
| 116                               | Stream 12         | L 63            | 4.24                | 26.43                  | 78.86 | 460.2                     |
| 117                               | Stream 11         | L 64            | 3.68                | 26.44                  | 78.87 | 462                       |
| 118                               | Basil Nadi        | L 65            | 192                 | 26.44                  | 78.89 | 464.4                     |
| 119                               | Stream 10         | L 66            | 2.58                | 26.43                  | 78.93 | 472.5                     |
| 120                               | Stream 9          | L 67            | 4.46                | 26.44                  | 78.95 | 474                       |
| 121                               | Stream 8          | L 68            | 7.88                | 26.40                  | 78.99 | 481.2                     |
| 122                               | Stream 7a         | R 54            | 3.66                | 26.39                  | 79.01 | 487.3                     |
| 123                               | Stream 7          | L 69            | 3.29                | 26.38                  | 79.04 | 490                       |
| 124                               | Stream 6          | L 70            | 1.66                | 26.41                  | 79.08 | 496.4                     |
| 125                               | Stream 5          | L 71            | 1.42                | 26.41                  | 79.09 | 497.1                     |
| 126                               | Stream 4          | L 72            | 1.76                | 26.42                  | 79.08 | 497.7                     |
| 127                               | Stream 3          | L 73            | 4.73                | 26.43                  | 79.09 | 499                       |
| 128                               | Stream 2          | L 74            | 3.51                | 26.42                  | 79.10 | 500.8                     |
| 129                               | Stream 1          | L 75            | 2.96                | 26.41                  | 79.12 | 504.4                     |
| 130                               | Pahuj River       | R 55            | 259                 | 26.42                  | 79.16 | 507.1                     |
| 131                               | Kunwari River     | L 76            | 429                 | 26.43                  | 79.19 | 512.6                     |

# AERMA BASIN AND ITS RIVER NETWORK

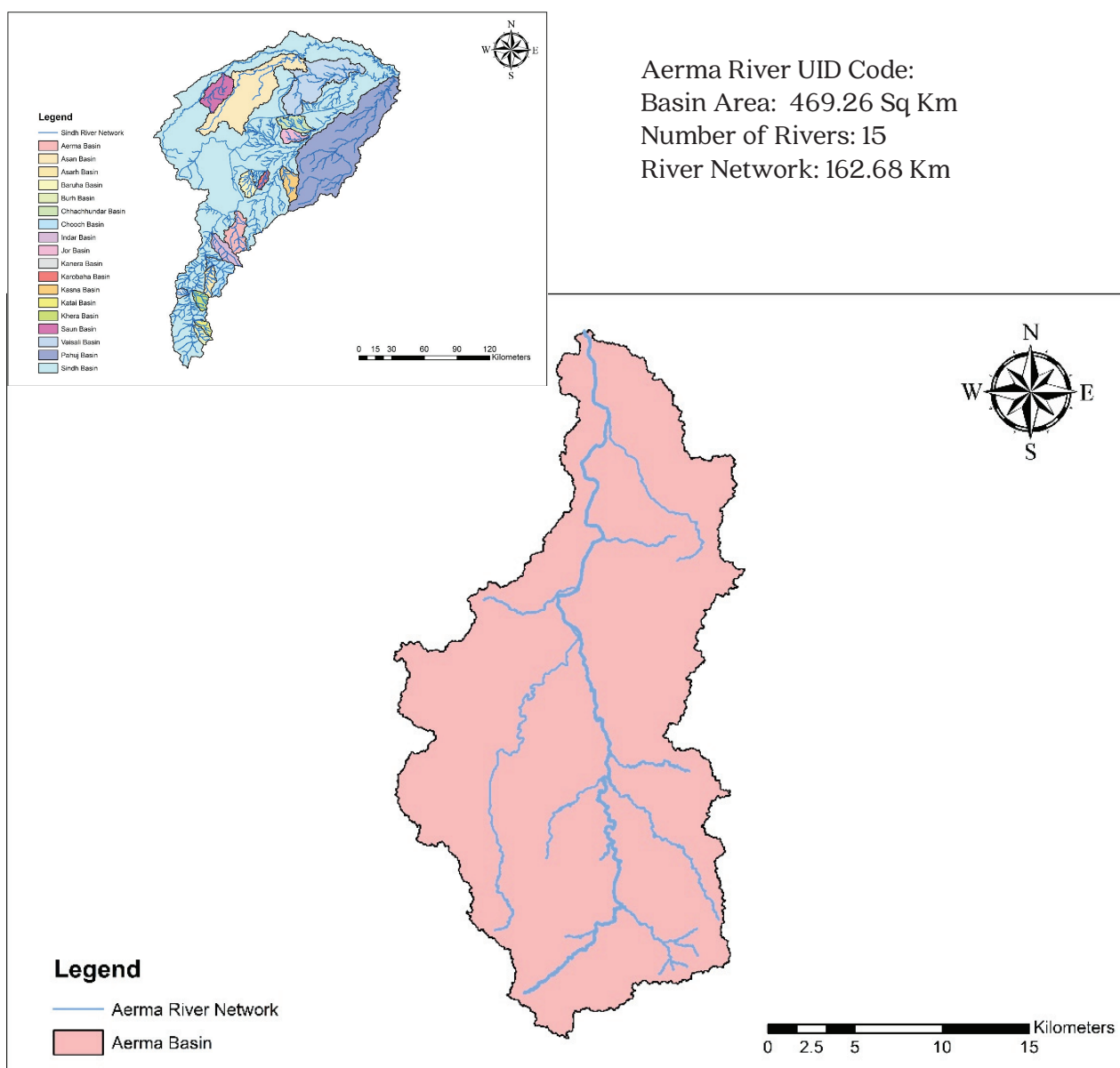
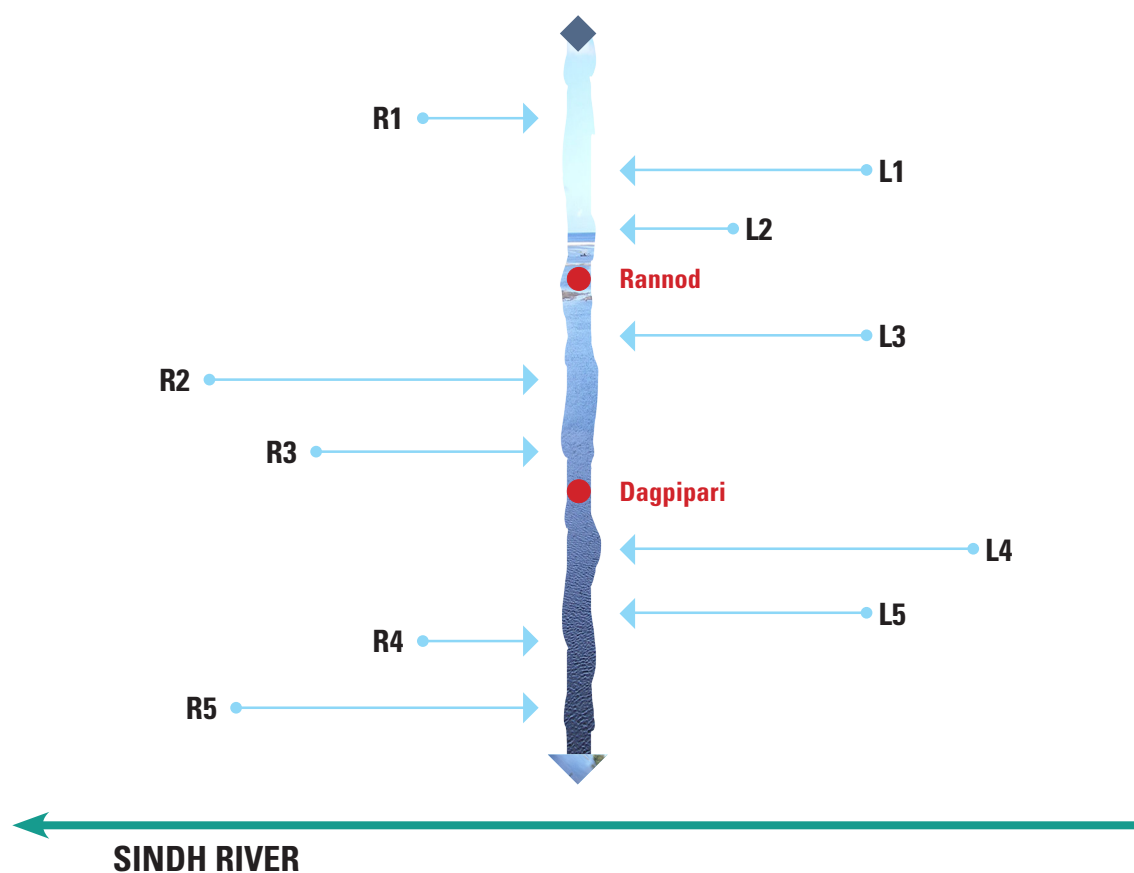


Figure: Aerma River Network

## AERMA RIVER MAINSTEM FLOW DIAGRAM



| AERMA NALA RIVER MAINSTEM NETWORK |               |                 |                     |                        |       |                           |
|-----------------------------------|---------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                             | River Name    | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                   |               |                 |                     | Lat                    | Long  |                           |
| 1                                 | Stream 7      | R1              | 2.63                | 25.00                  | 77.88 | 6.9                       |
| 2                                 | Stream 6      | L1              | 7                   | 25.02                  | 77.89 | 10                        |
| 3                                 | Stream 5      | L2              | 2.87                | 25.05                  | 77.89 | 14.8                      |
| 4                                 | Stream 4      | L3              | 8                   | 25.08                  | 77.88 | 20.8                      |
| 5                                 | Patapura Nala | R2              | 15.9                | 25.08                  | 77.88 | 21.3                      |
| 6                                 | Stream 8      | R3              | 8.94                | 25.09                  | 77.88 | 22.6                      |
| 7                                 | Madar Nadi    | L4              | 28                  | 25.16                  | 77.86 | 31.7                      |
| 8                                 | Stream 3      | L5              | 8.26                | 25.18                  | 77.86 | 35                        |
| 9                                 | Stream 2      | R4              | 5.26                | 25.21                  | 77.88 | 38.5                      |
| 10                                | Stream 1      | R5              | 13.3                | 25.27                  | 77.88 | 47.87                     |

# ASAN BASIN AND ITS RIVER NETWORK

Asan River UID Code:  
Basin Area: 2318.18 Sq Km  
Number of Rivers: 08  
River Network: 264.15 Km

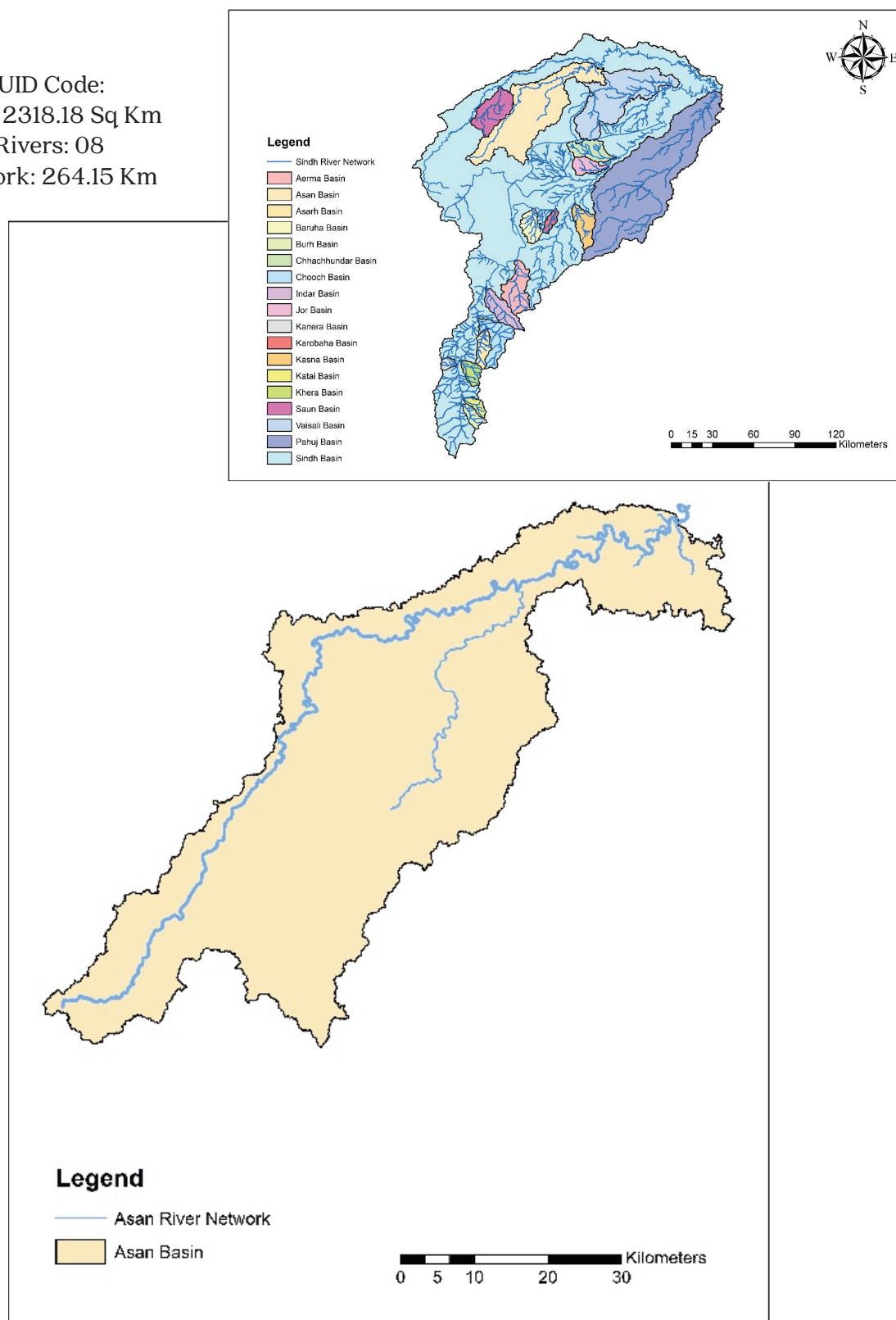


Figure: Asan River Network

## ASAN RIVER MAINSTEM FLOW DIAGRAM

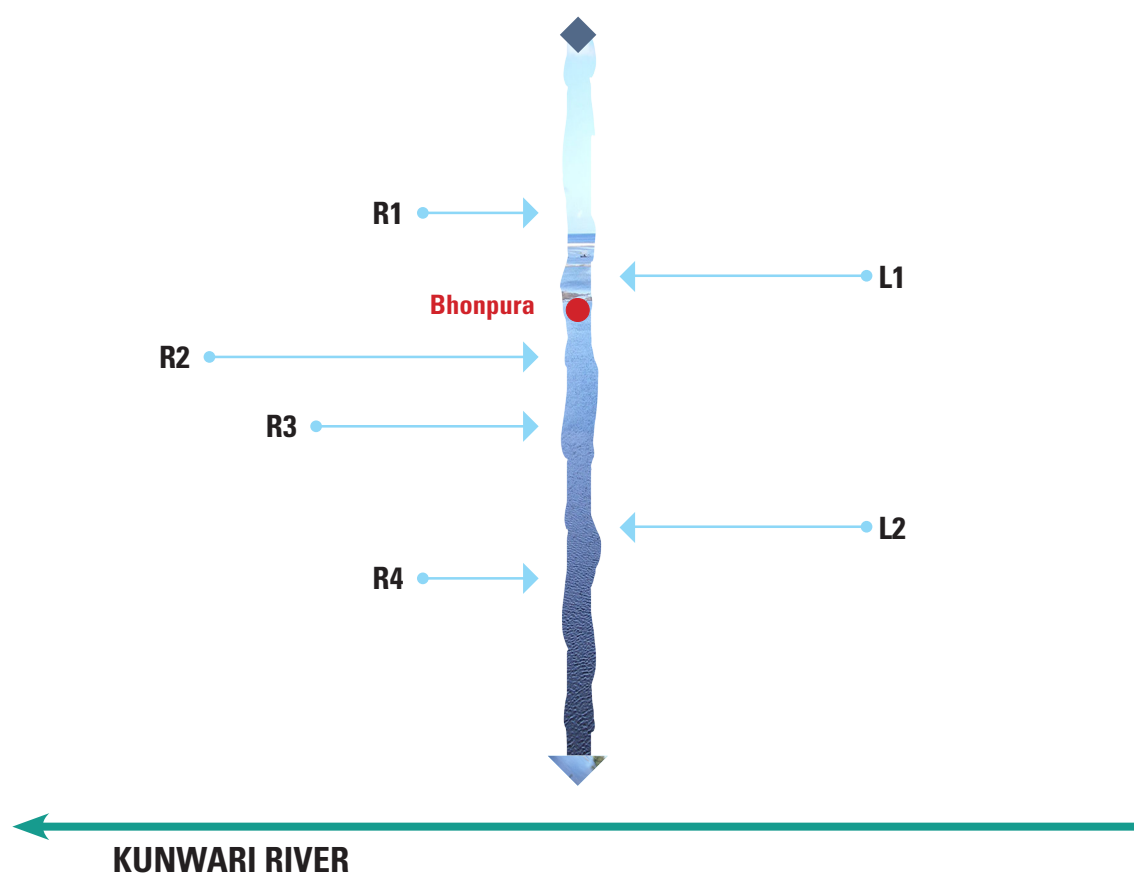


Figure: Flow Diagram of Asan River

| ASAN RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|-----------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                       | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                             |            |                 |                     | Lat                    | Long  |                           |
| 1                           | Sankh Nadi | R1              | 53.8                | 26.50                  | 78.16 | 131                       |
| 2                           | Stream 06  | L1              | 4.56                | 26.56                  | 78.27 | 154.4                     |
| 3                           | Stream 05  | R2              | 4.7                 | 26.55                  | 78.34 | 168.3                     |
| 4                           | Stream 04  | R3              | 1.64                | 26.57                  | 78.36 | 174.5                     |
| 5                           | Stream 03  | L2              | 5.16                | 26.57                  | 78.36 | 175.32                    |
| 6                           | Stream 02  | L3              | 3.14                | 26.58                  | 78.37 | 177.07                    |
| 7                           | Stream 01  | R4              | 12.6                | 26.58                  | 78.38 | 179.02                    |

# ASRAH BASIN AND ITS RIVER NETWORK

Asrah River UID Code:  
 Basin Area: 197.75 Sq Km  
 Number of Rivers: 13  
 River Network: 131.89 Km

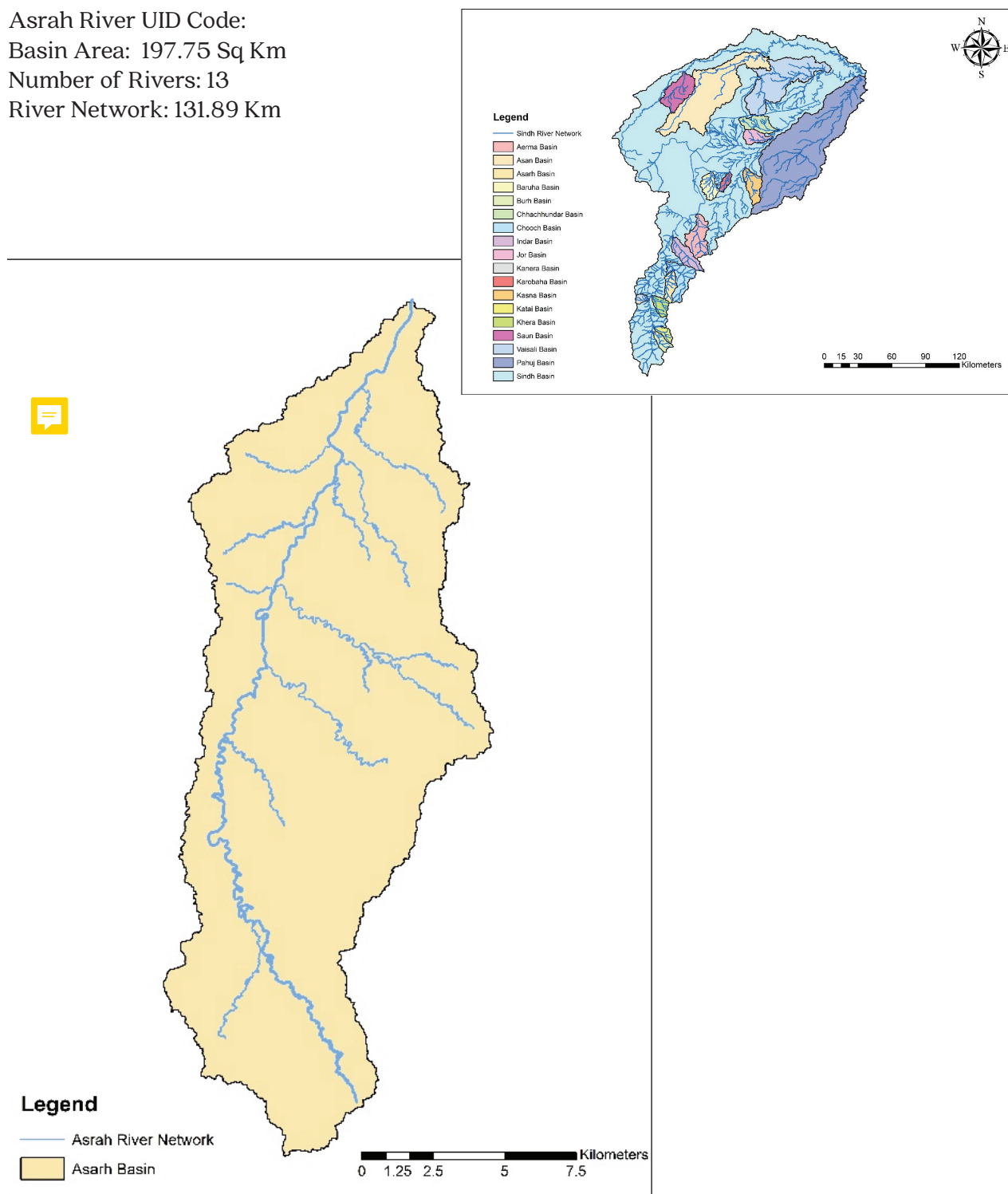


Figure: Asrah River Network

## ASRAH RIVER MAINSTEM FLOW DIAGRAM

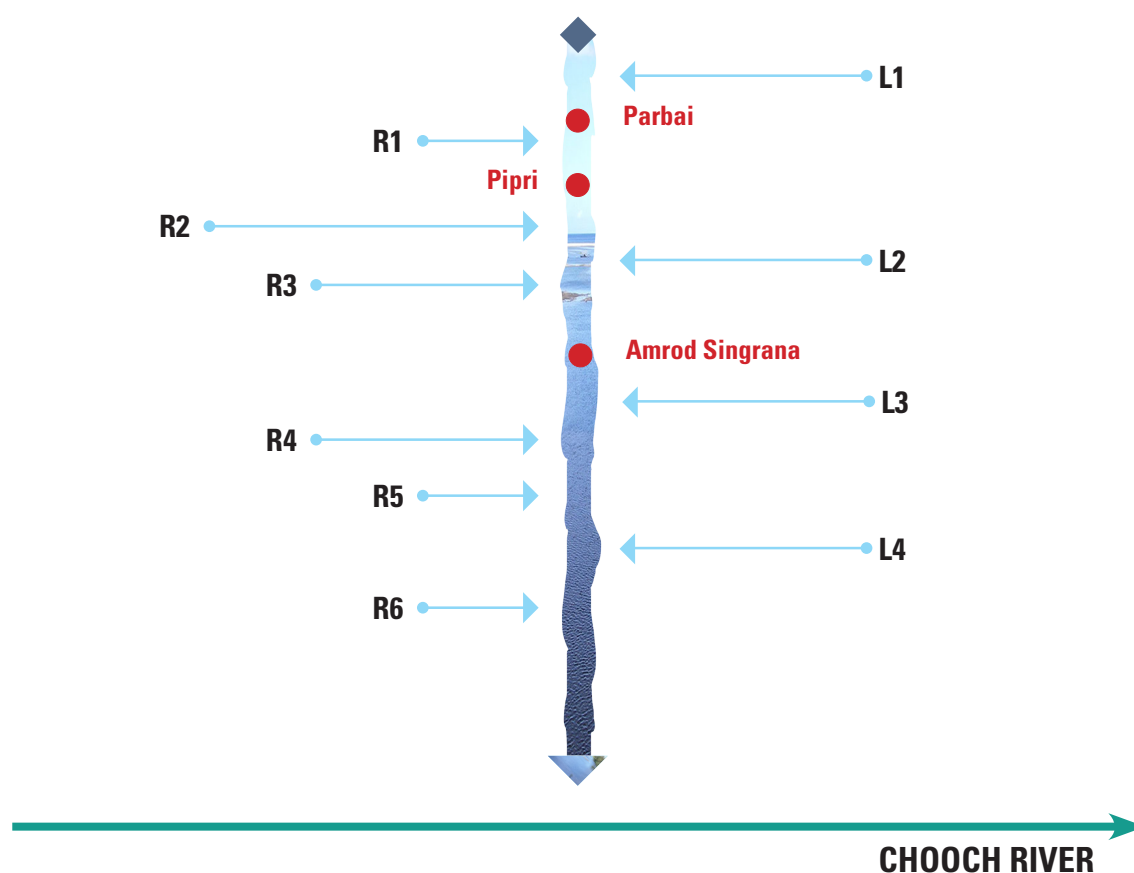


Figure: Flow Diagram of Asrah River

| ASARH RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |            |                 |                     | Lat                    | Long  |                           |
| 1                            | Stream 10  | L1              | 7.6                 | 24.67                  | 77.63 | 11.8                      |
| 2                            | Stream 9   | R1              | 6.5                 | 24.72                  | 77.62 | 24.9                      |
| 3                            | Stream 8   | R2              | 10.3                | 24.75                  | 77.63 | 29.1                      |
| 4                            | Stream 7   | L2              | 2.35                | 24.77                  | 77.63 | 32.9                      |
| 5                            | Stream 5   | R3              | 11.7                | 24.77                  | 77.63 | 33.1                      |
| 6                            | Stream 6   | L3              | 7.45                | 24.80                  | 77.64 | 36.58                     |
| 7                            | Stream 4   | R4              | 6.2                 | 24.81                  | 77.65 | 38.03                     |
| 8                            | Stream 3   | R5              | 8                   | 24.81                  | 77.65 | 38.71                     |
| 9                            | Stream 2   | L4              | 4.9                 | 24.82                  | 77.65 | 39.46                     |
| 10                           | Stream 1   | R6              | 9.85                | 24.84                  | 77.66 | 42                        |

# ASRAH BASIN AND ITS RIVER NETWORK

Baruha River UID Code:  
 Basin Area: 239.61 Sq Km  
 Number of Rivers: 14  
 River Network: 112.63 Km

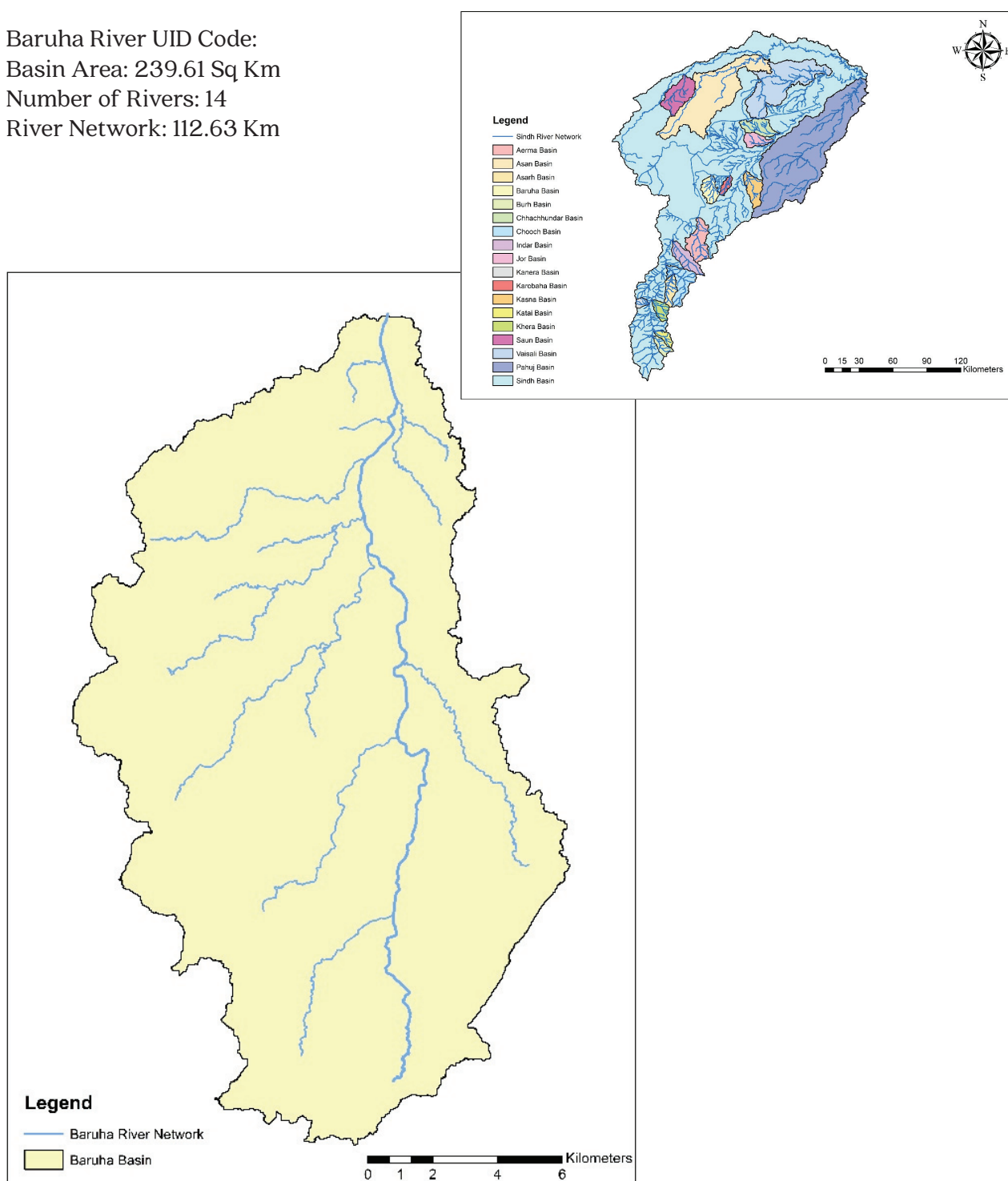


Figure: Baruha River Network

## BARUHA RIVER MAINSTEM FLOW DIAGRAM

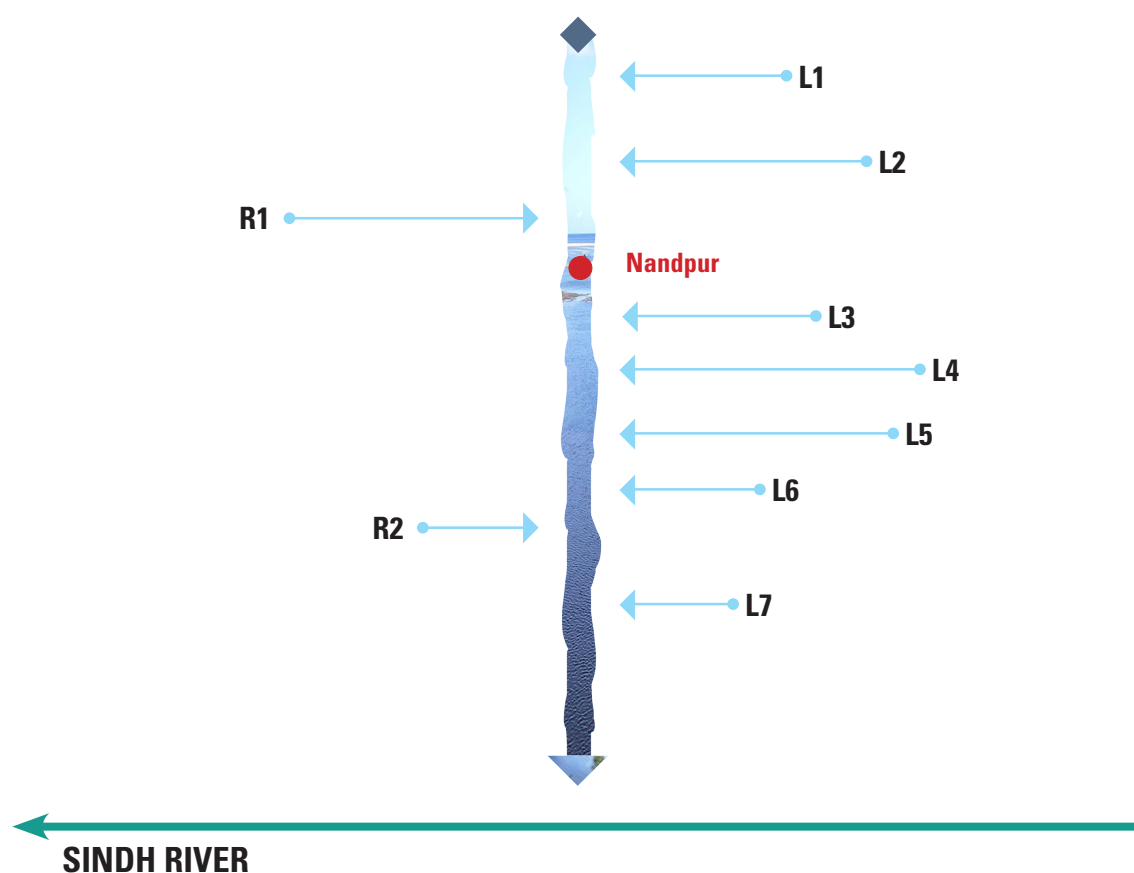


Figure: Flow Diagram of Baruha River

| BARUHA RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|-------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                         | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                               |            |                 |                     | Lat                    | Long  |                           |
| 1                             | Stream 8   | L1              | 6.83                | 25.48                  | 77.99 | 6.7                       |
| 2                             | Stream 7   | L2              | 9.34                | 25.53                  | 77.99 | 13.7                      |
| 3                             | Narai Nala | R1              | 10.5                | 25.55                  | 77.99 | 16.4                      |
| 4                             | Stream 6   | L3              | 8.33                | 25.55                  | 77.96 | 20.64                     |
| 5                             | Stream 5   | L4              | 11                  | 25.59                  | 77.97 | 21.99                     |
| 6                             | Stream 4   | L5              | 10                  | 25.61                  | 77.97 | 23.7                      |
| 7                             | Stream 3   | L6              | 1.73                | 25.62                  | 77.98 | 25.32                     |
| 8                             | Stream 2   | R2              | 3.28                | 25.62                  | 77.98 | 26.12                     |
| 9                             | Stream 1   | L7              | 2.93                | 25.64                  | 77.98 | 27.57                     |

# BURH BASIN AND ITS RIVER NETWORK

Burh River UID Code:  
Basin Area: 135.08 Sq Km  
Number of Rivers: 06  
River Network: 76.01 Km

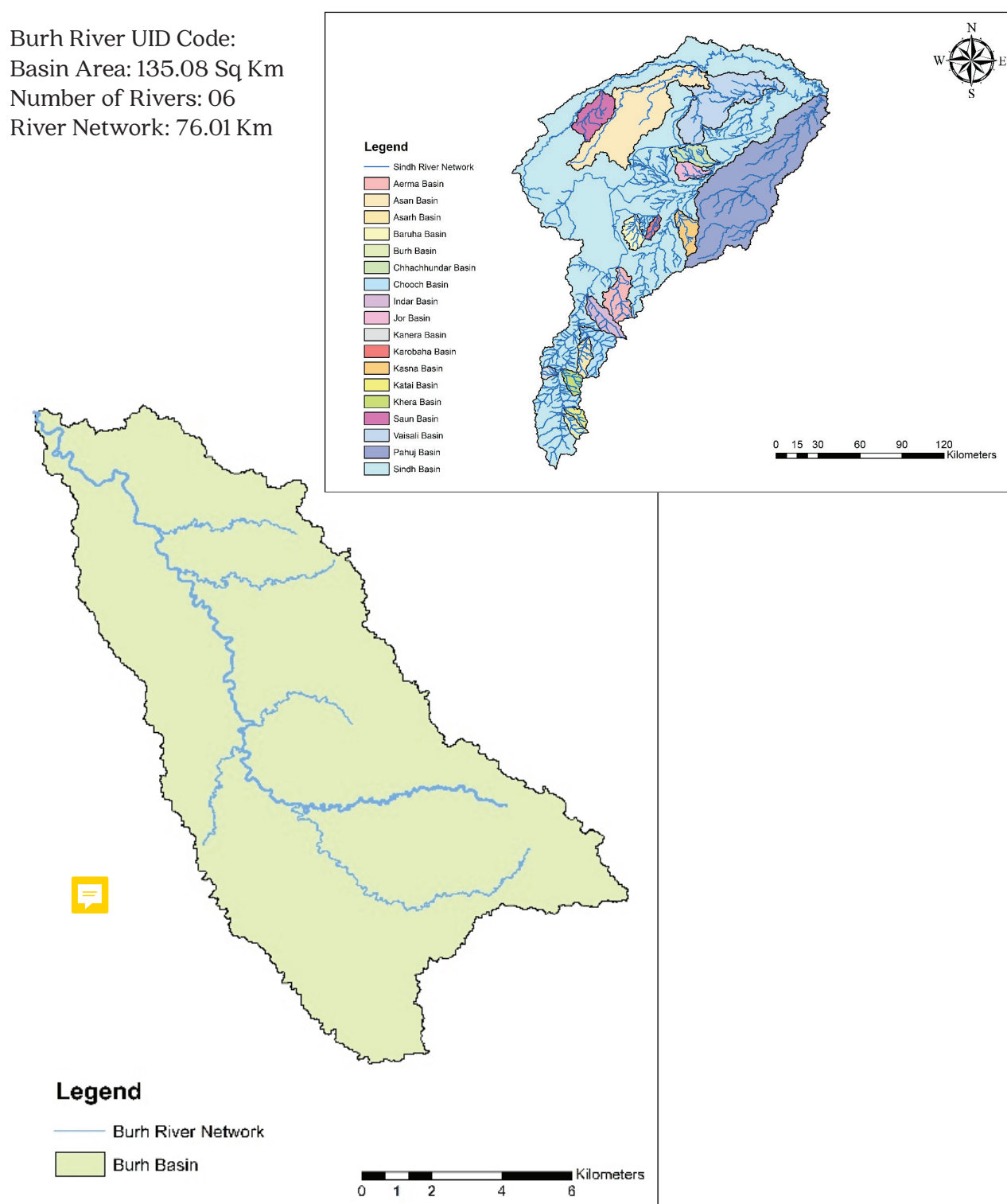


Figure: Burh River Network

## BURH RIVER MAINSTEM FLOW DIAGRAM

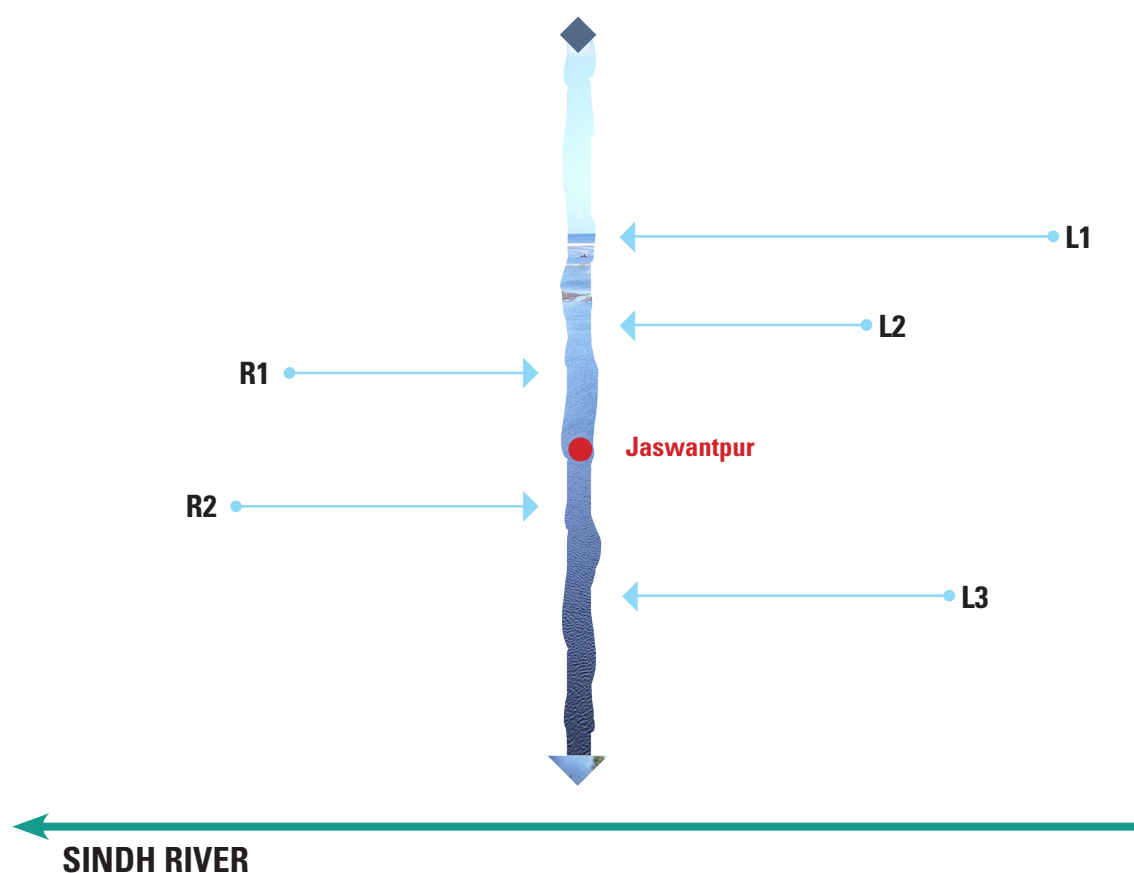


Figure: Flow Diagram of Burh River

| BURH RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|-----------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                       | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                             |            |                 |                     | Lat                    | Long  |                           |
| 1                           | Stream 1   | L1              | 14                  | 24.27                  | 77.58 | 10                        |
| 2                           | Stream 2   | L2              | 5.85                | 24.28                  | 77.56 | 13.6                      |
| 3                           | Stream 3   | R1              | 5.3                 | 24.29                  | 77.57 | 14.7                      |
| 4                           | Stream 4   | R2              | 9.27                | 24.33                  | 77.55 | 21.94                     |
| 5                           | Stream 5   | L3              | 7.15                | 24.34                  | 77.54 | 23.79                     |

# CHACHHUNDAR BASIN AND ITS RIVER NETWORK

Chachhundar River UID Code:

Basin Area: 315.07 Sq Km

Number of Rivers: 17

River Network: 183.97 Km

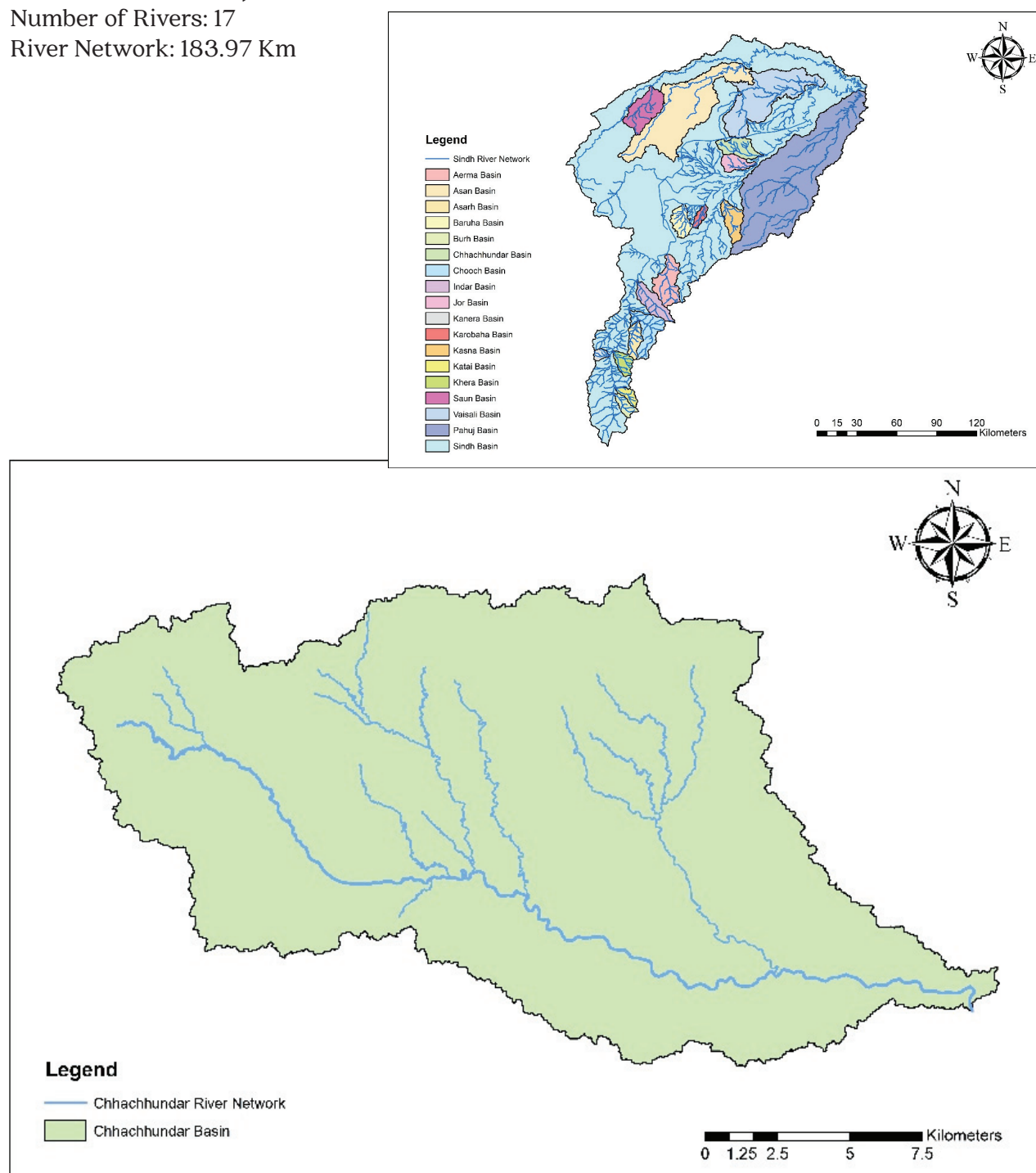


Figure: Chachhundar River Network

## CHACHHUNDAR RIVER MAINSTEM FLOW DIAGRAM

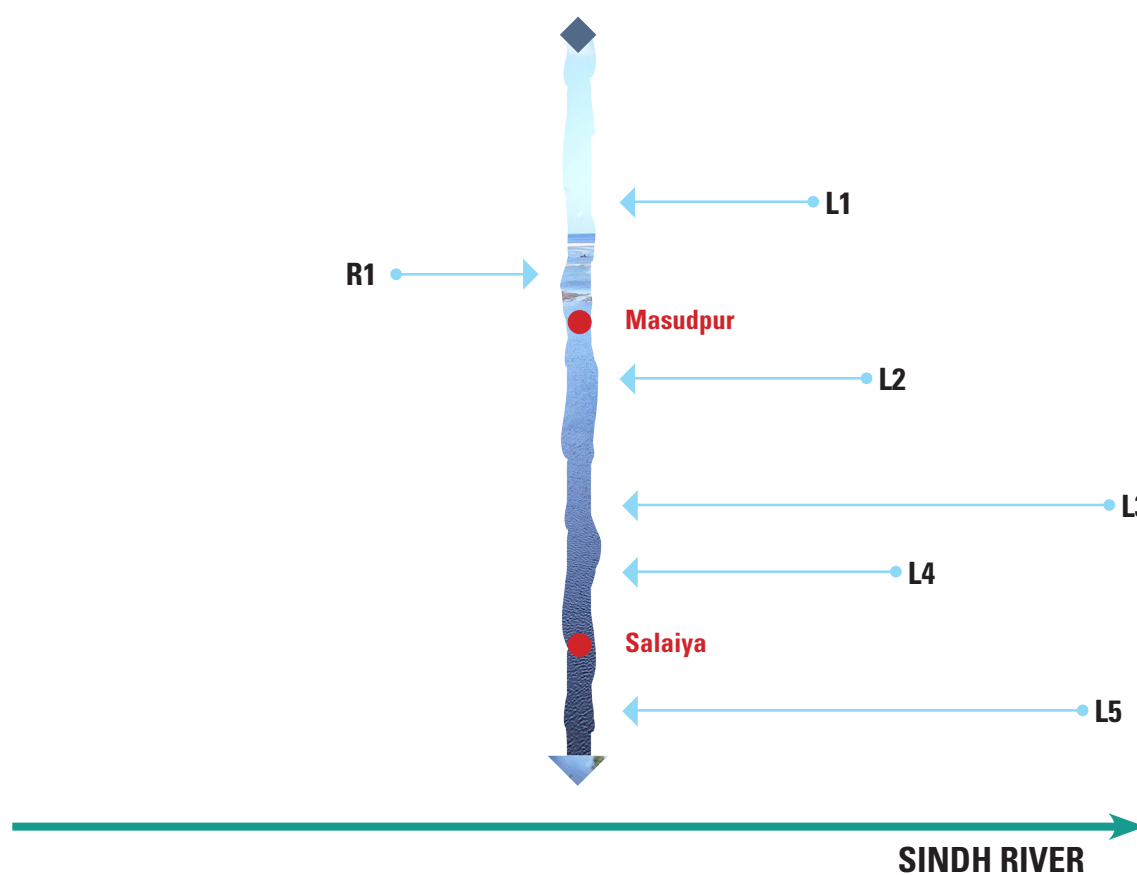


Figure: Flow Diagram of Chhachhundar River

| CHHACHHUNDAR RIVER MAINSTEM NETWORK |                |                 |                     |                        |       |                           |
|-------------------------------------|----------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                               | River Name     | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                                     |                |                 |                     | Lat                    | Long  |                           |
| 1                                   | Stream 1       | L1              | 3.52                | 26.04                  | 78.24 | 5.3                       |
| 2                                   | Stream 2       | R1              | 2.23                | 26.00                  | 78.32 | 16.6                      |
| 3                                   | Narkhara Nala  | L2              | 8.28                | 26.00                  | 78.33 | 17.3                      |
| 4                                   | Sukha Nala     | L3              | 13.9                | 26.01                  | 78.34 | 18.9                      |
| 5                                   | Bari Khon Nala | L4              | 11.8                | 26.00                  | 78.36 | 21.5                      |
| 6                                   | Jhinni Nala    | L5              | 15.8                | 25.98                  | 78.44 | 33.47                     |

# CHOOCH BASIN AND ITS RIVER NETWORK

Chooch River UID Code:  
 Basin Area: 436.88 Sq Km  
 Number of Rivers: 17  
 River Network: 225.22 Km

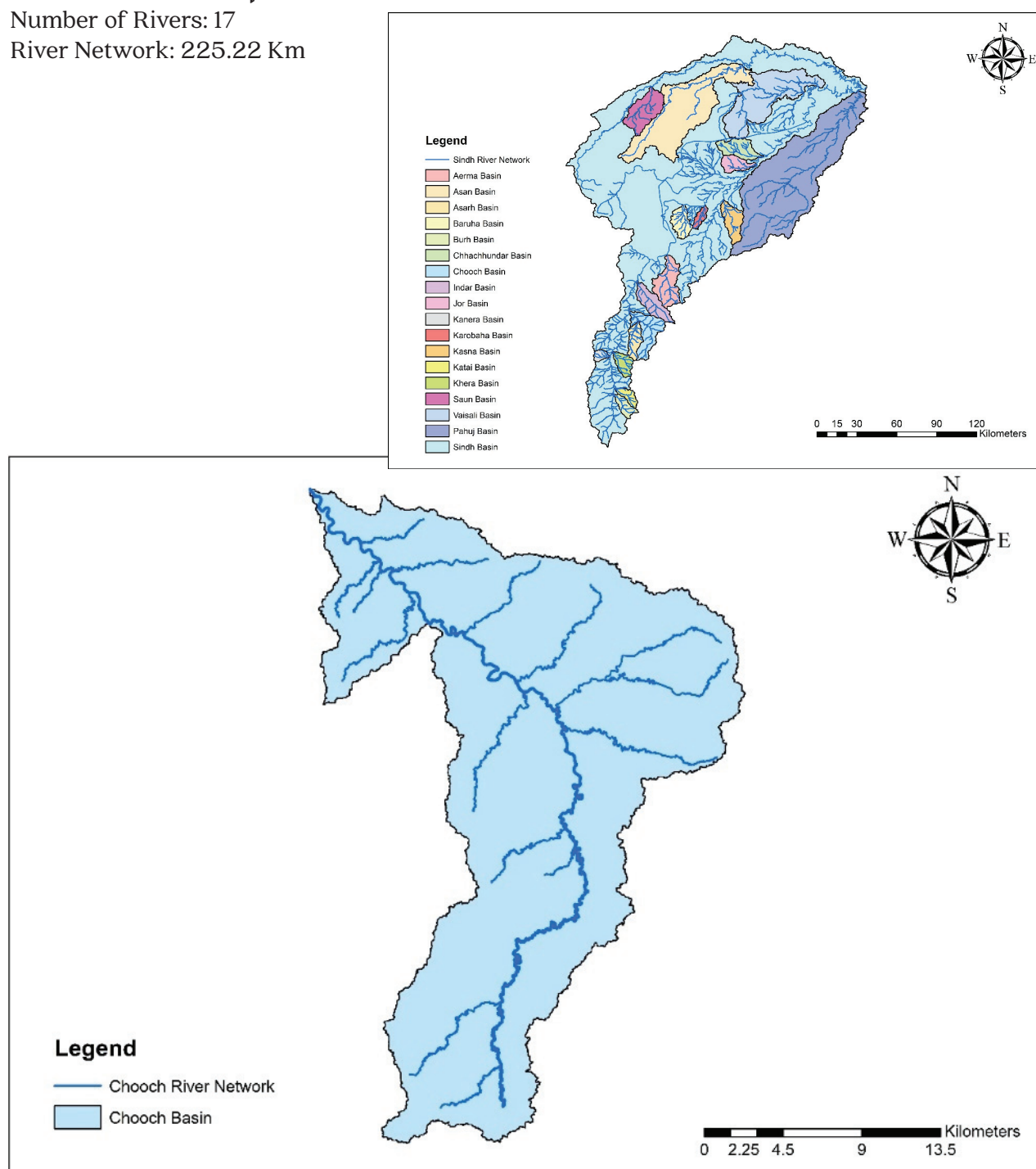


Figure: Chooch River Network

## CHOOCH RIVER MAINSTEM FLOW DIAGRAM

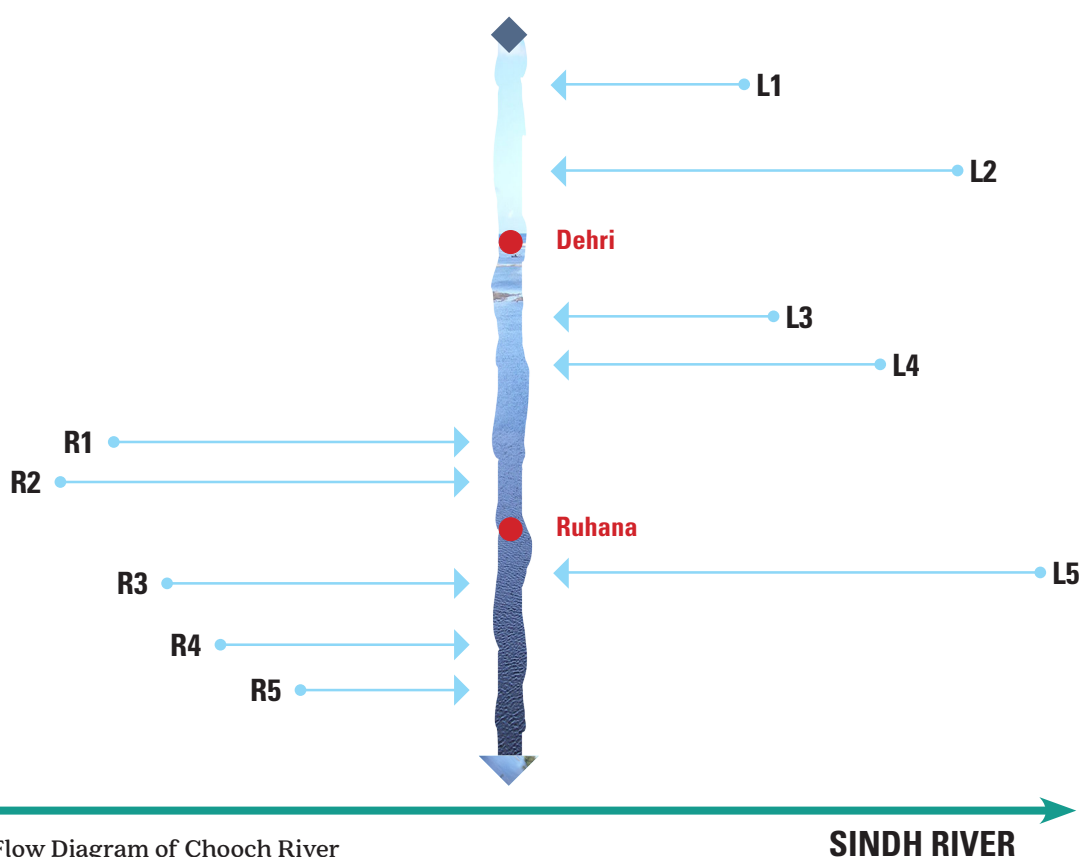


Figure: Flow Diagram of Chooch River

| CHOOCH RIVER MAINSTEM NETWORK |             |                 |                     |                        |       |                           |
|-------------------------------|-------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                         | River Name  | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                               |             |                 |                     | Lat                    | Long  |                           |
| 1                             | Stream 7    | L1              | 7                   | 24.64                  | 77.72 | 3.4                       |
| 2                             | Stream 8    | L2              | 12                  | 24.67                  | 77.72 | 10                        |
| 3                             | Stream 9    | L3              | 4.92                | 24.75                  | 77.76 | 30.4                      |
| 4                             | Stream 10   | L4              | 10                  | 24.76                  | 77.76 | 32                        |
| 5                             | Stream 11   | R1              | 15                  | 24.81                  | 77.75 | 41.4                      |
| 6                             | Banait Nadi | R2              | 15.5                | 24.82                  | 77.75 | 43.6                      |
| 7                             | Stream 12   | L5              | 13.4                | 24.83                  | 77.73 | 46.2                      |
| 8                             | Mohiya Nala | R3              | 13.5                | 24.84                  | 77.73 | 47                        |
| 9                             | Stream 6    | R4              | 9.2                 | 24.86                  | 77.70 | 53.1                      |
| 10                            | Asarh Nadi  | R5              | 46                  | 24.86                  | 77.68 | 56.8                      |
| 11                            | Stream 5    | L6              | 12.7                | 24.88                  | 77.67 | 59.1                      |
| 12                            | Stream 4    | R6              | 8.9                 | 24.89                  | 77.65 | 61.28                     |
| 13                            | Stream 3    | L7              | 4.9                 | 24.89                  | 77.65 | 62.03                     |
| 14                            | Stream 2    | L8              | 7.9                 | 24.90                  | 77.65 | 62.74                     |
| 15                            | Stream 1    | R7              | 6.65                | 24.91                  | 77.64 | 64.72                     |

# INDAR BASIN AND ITS RIVER NETWORK

Indar River UID Code:  
 Basin Area: 327.70 Sq Km  
 Number of Rivers: 11  
 River Network: 191.26 Km

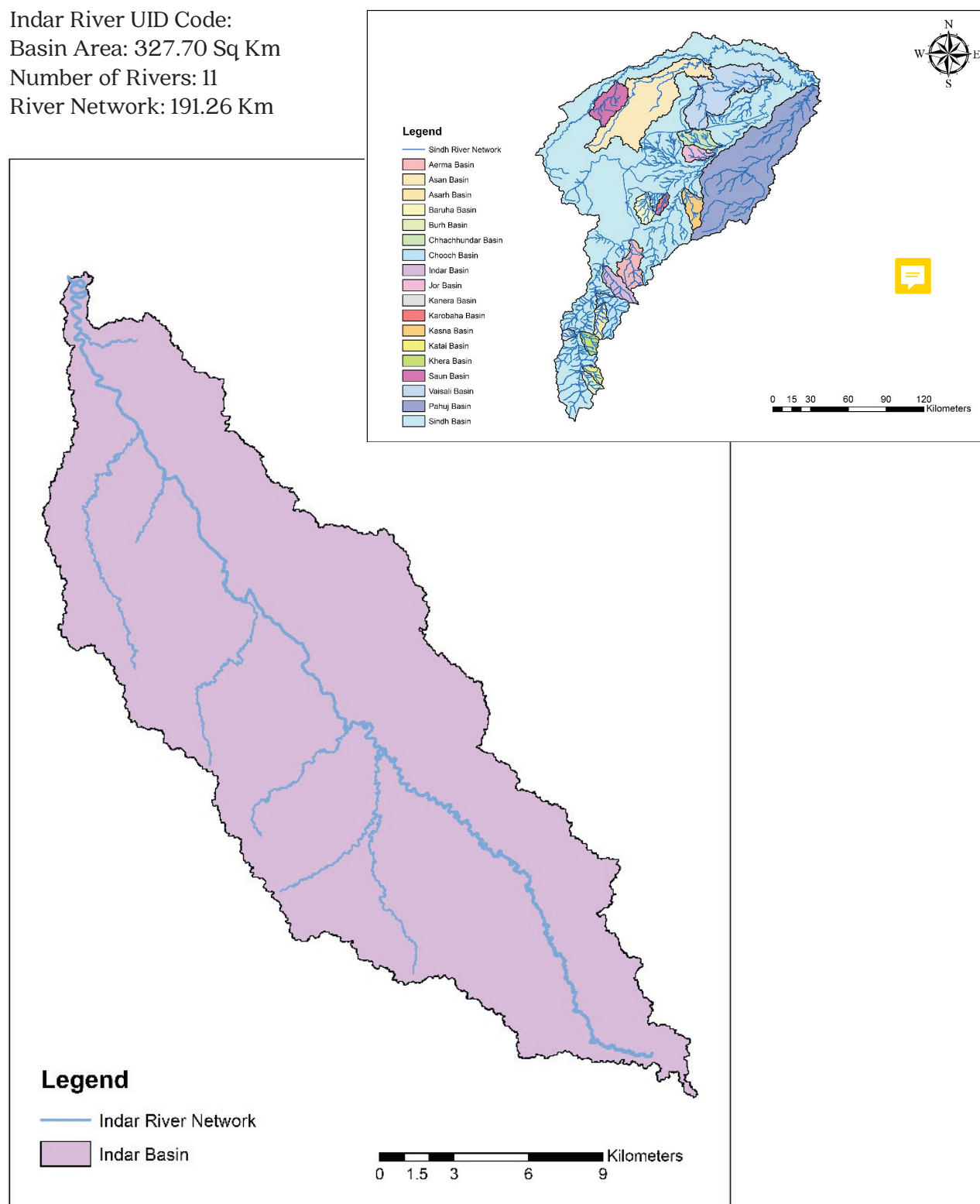


Figure: Indar River Network

## INDAR RIVER MAINSTEM FLOW DIAGRAM

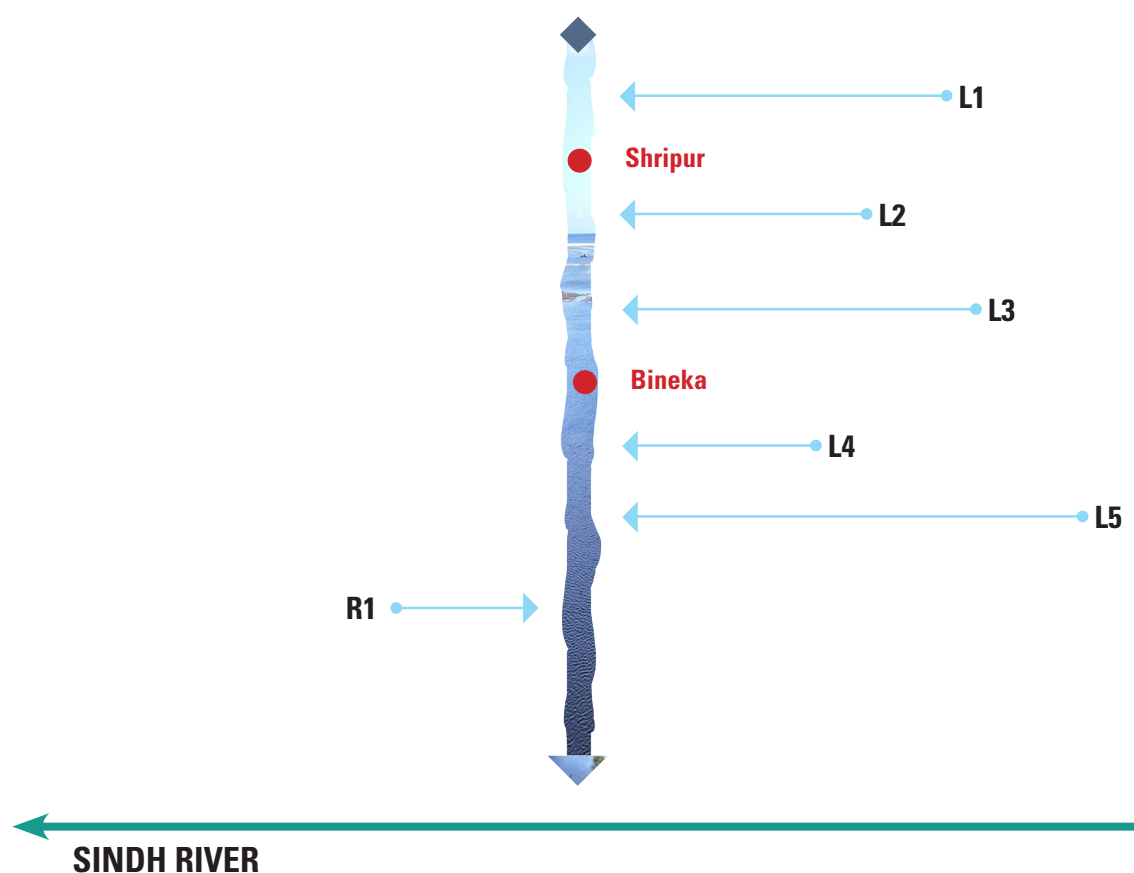


Figure: Flow Diagram of Indar River

| INDAR RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |            |                 |                     | Lat                    | Long  |                           |
| 1                            | Palko Nala | L1              | 15.7                | 24.96                  | 77.79 | 29                        |
| 2                            | Stream 4   | L2              | 11                  | 24.97                  | 77.78 | 32.7                      |
| 3                            | Stream 5   | L3              | 12.5                | 25.02                  | 77.74 | 41                        |
| 4                            | Stream 3   | L4              | 4.61                | 25.06                  | 77.70 | 48.5                      |
| 5                            | Stream 2   | L5              | 18.4                | 25.08                  | 77.69 | 50.7                      |
| 6                            | Stream 1   | R1              | 4.5                 | 25.11                  | 77.67 | 56.67                     |

## JOR BASIN AND ITS RIVER NETWORK

Jor River UID Code:  
 Basin Area: 201.43 Sq Km  
 Number of Rivers: 05  
 River Network: 75.80 Km

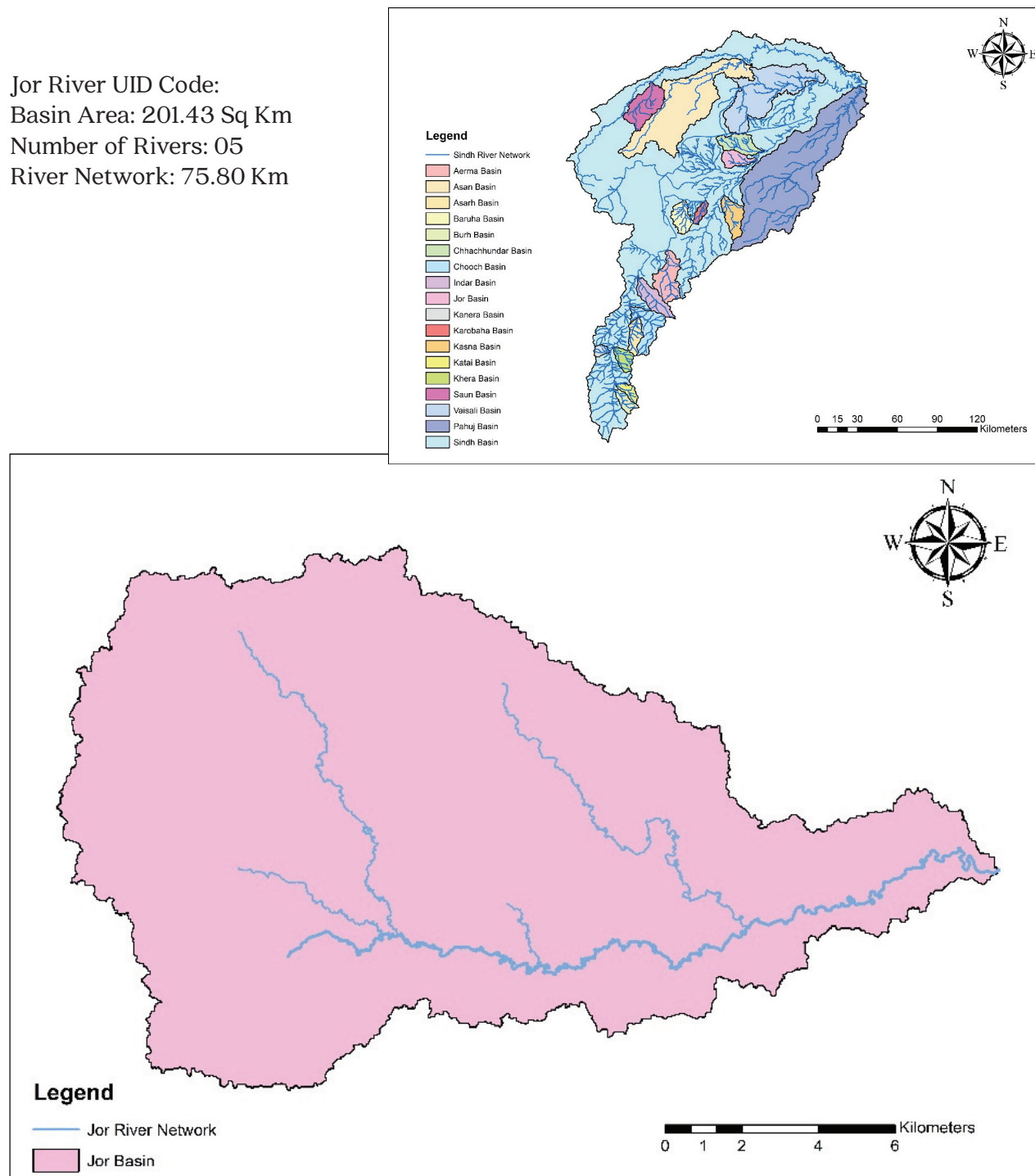


Figure: Jor River Network

## JOR RIVER MAINSTEM FLOW DIAGRAM

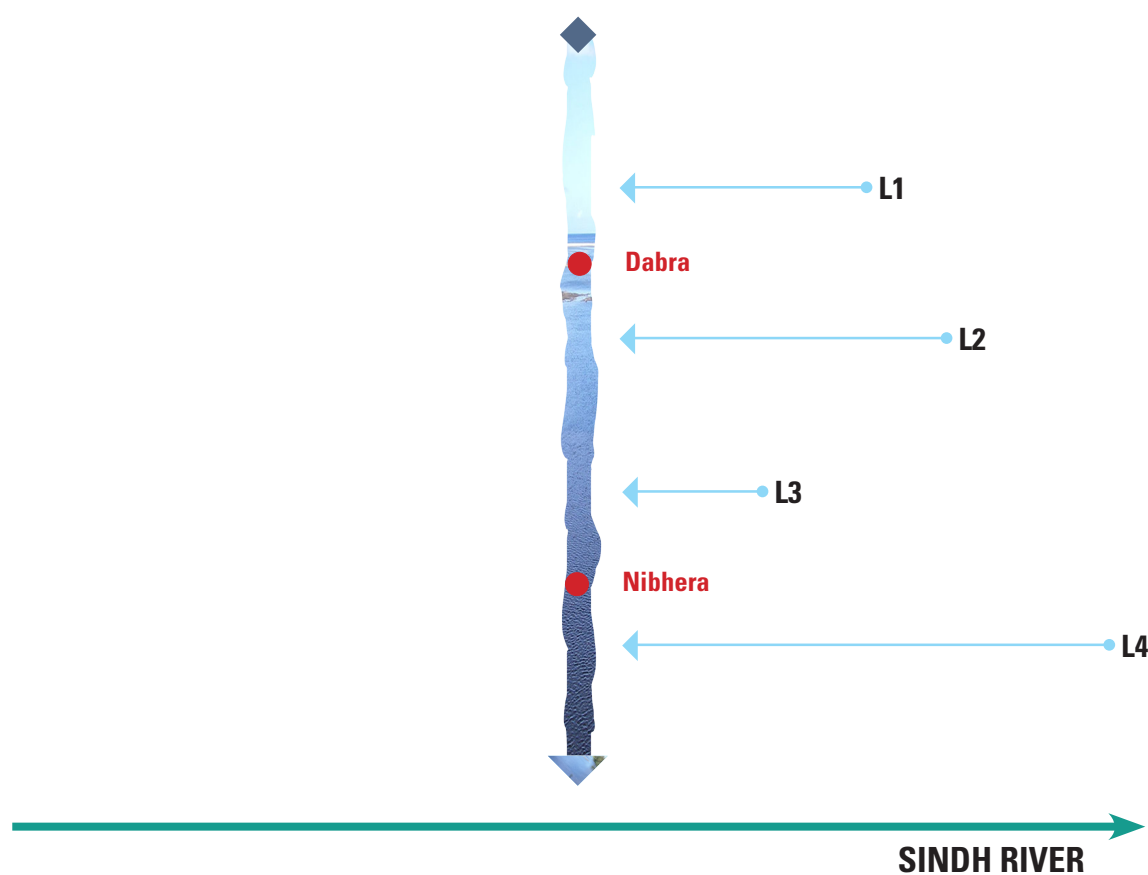


Figure: Flow Diagram of Jor Nala

| JOR RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|----------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                      | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                            |            |                 |                     | Lat                    | Long  |                           |
| 1                          | Stream 1   | L1              | 5.84                | 25.90                  | 78.31 | 3.9                       |
| 2                          | Stream 2   | L2              | 15.1                | 25.90                  | 78.32 | 4.6                       |
| 3                          | Stream 3   | L3              | 2.7                 | 25.89                  | 78.36 | 11.4                      |
| 4                          | Lirma Nala | L4              | 18.3                | 25.90                  | 78.41 | 22.4                      |

# KANERA BASIN AND ITS RIVER NETWORK

Kanera River UID Code:  
 Basin Area: 68.54 Sq Km  
 Number of Rivers: 05  
 River Network: 49.28 Km

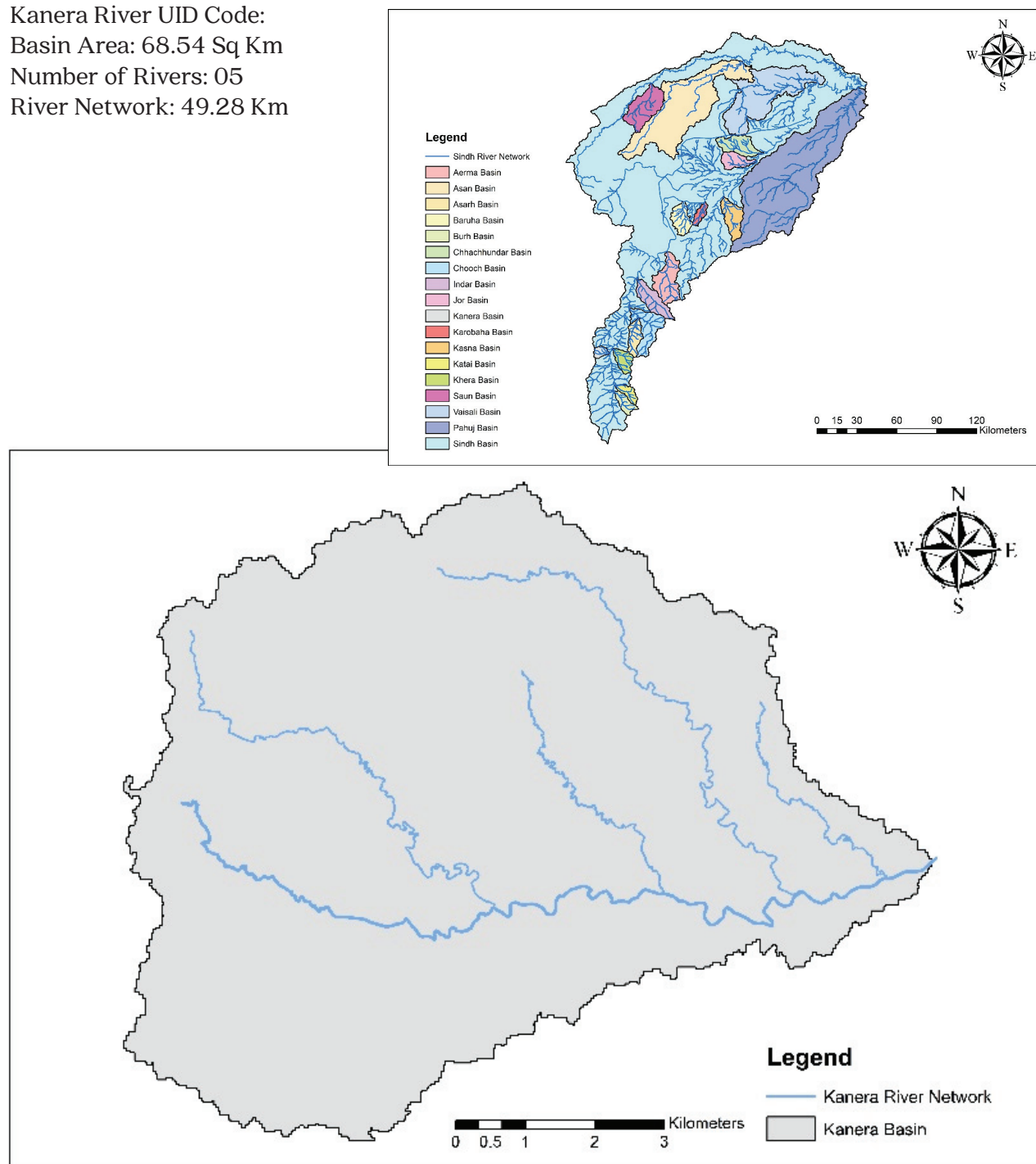


Figure: Kanera River Network

## KANERA RIVER MAINSTEM FLOW DIAGRAM

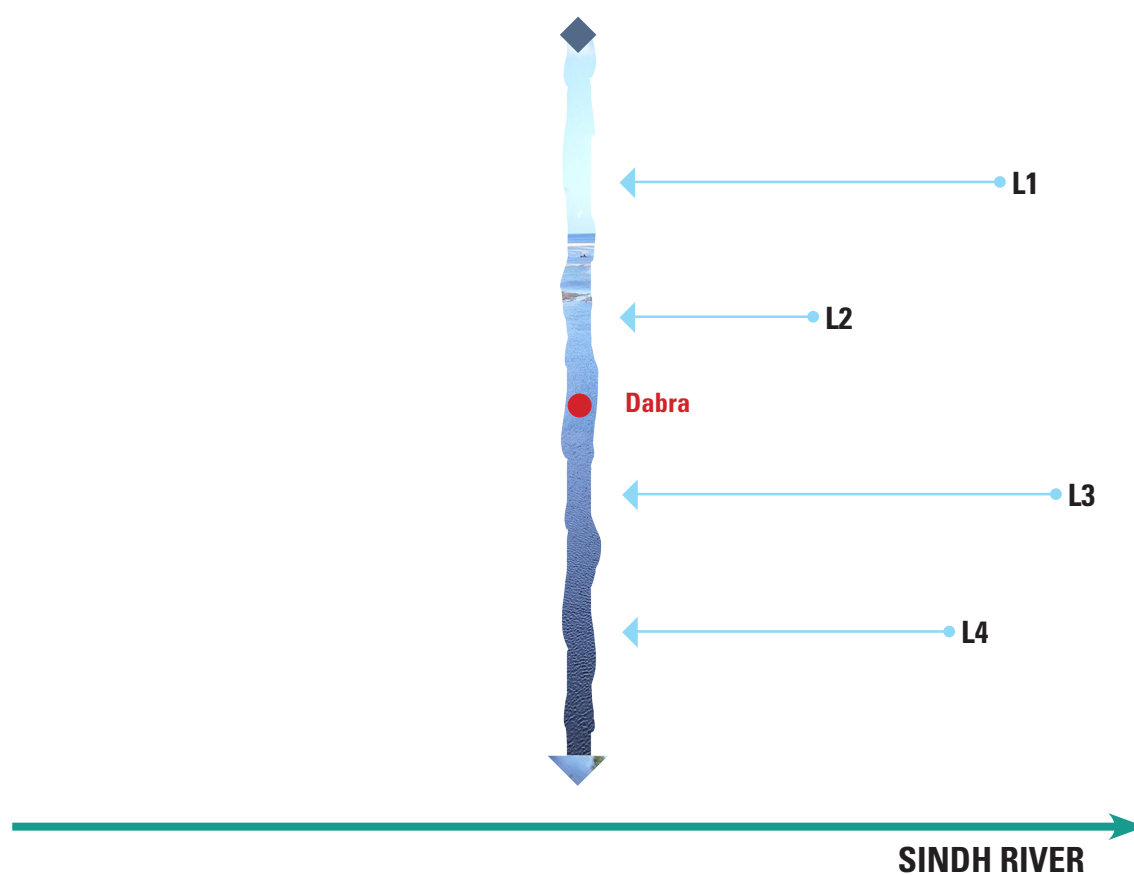


Figure: Flow Diagram of Kanera River

| KANERA RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|-------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                         | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                               |            |                 |                     | Lat                    | Long  |                           |
| 1                             | Stream 1   | L1              | 10.7                | 24.62                  | 77.42 | 6.92                      |
| 2                             | Stream 2   | L2              | 6.35                | 24.62                  | 77.44 | 10.32                     |
| 3                             | Stream 3   | L3              | 11.5                | 24.62                  | 77.46 | 13.47                     |
| 4                             | Lirma Nala | L4              | 5                   | 24.62                  | 77.48 | 14.88                     |

# KAROBABA BASIN AND ITS RIVER NETWORK

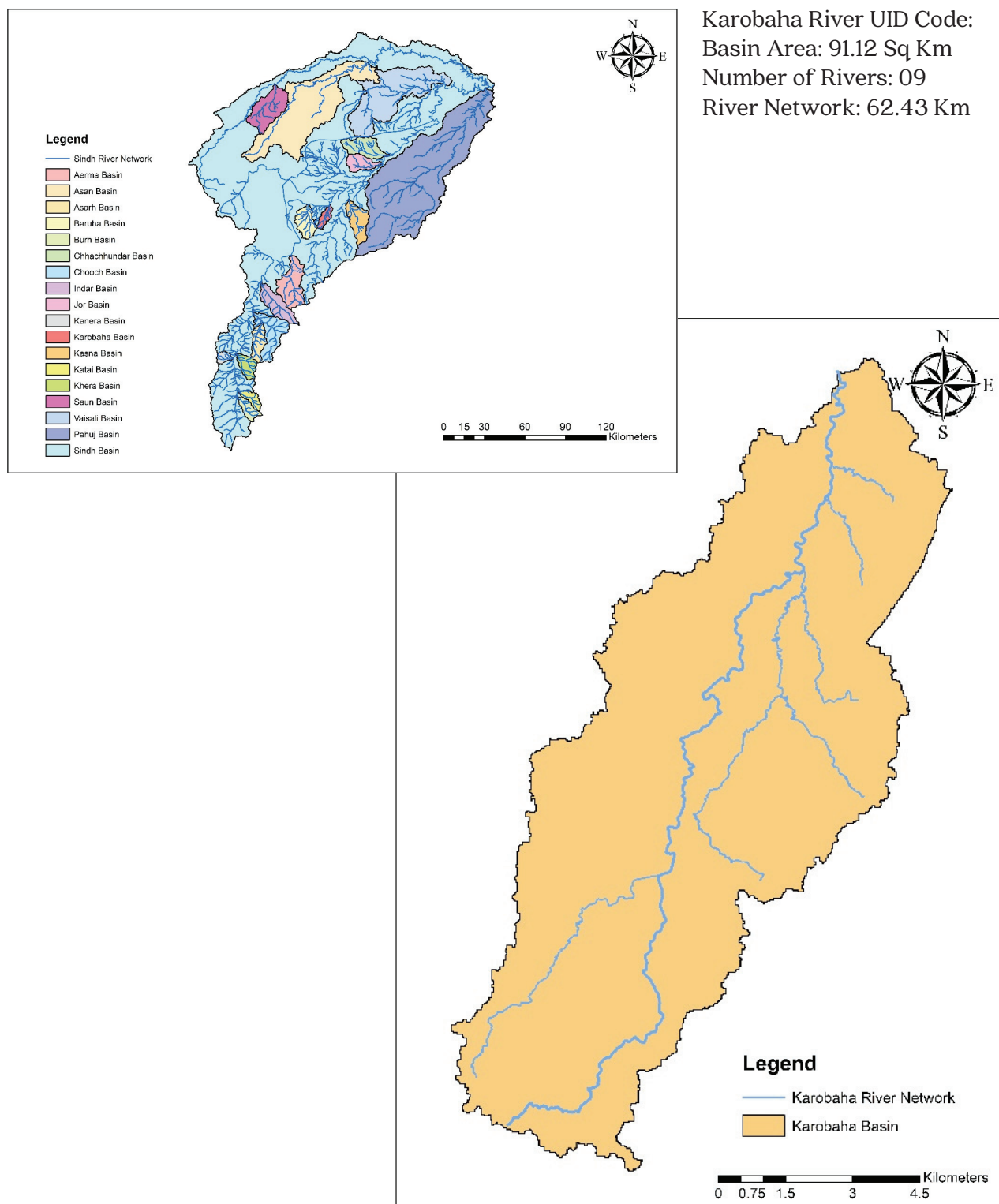


Figure: Karobaha River Network

## KAROBAHA RIVER MAINSTEM FLOW DIAGRAM

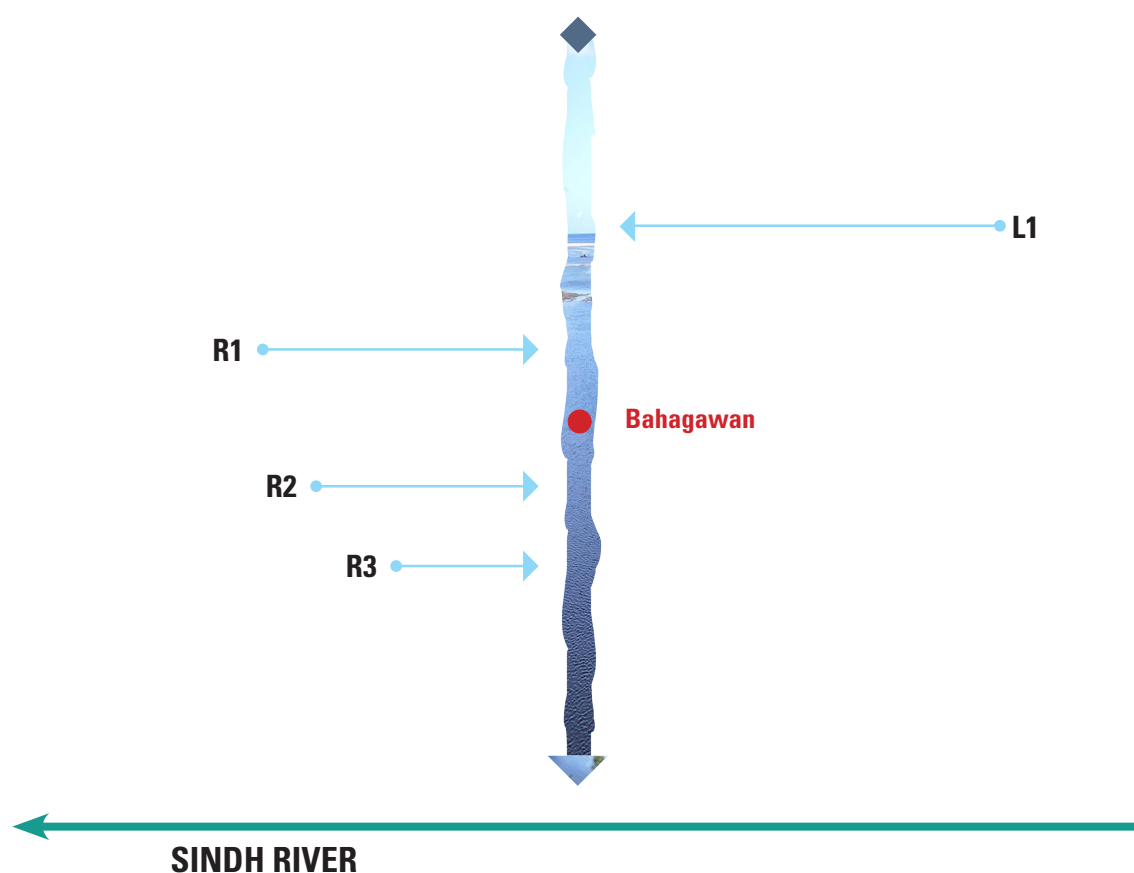


Figure: Flow Diagram of Karobaha Nala

| KANERA RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|-------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                         | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                               |            |                 |                     | Lat                    | Long  |                           |
| 1                             | Stream 4   | L1              | 8.64                | 25.54                  | 78.08 | 9.4                       |
| 2                             | Stream 3   | R1              | 9.23                | 25.60                  | 78.11 | 20.89                     |
| 3                             | Stream 2   | R2              | 3                   | 25.62                  | 78.12 | 23.39                     |
| 4                             | Stream 1   | R3              | 2.6                 | 25.62                  | 78.12 | 24.13                     |

# KASNA BASIN AND ITS RIVER NETWORK

Kasna River UID Code:  
 Basin Area: 301.86 Sq Km  
 Number of Rivers: 10  
 River Network: 101.26 Km

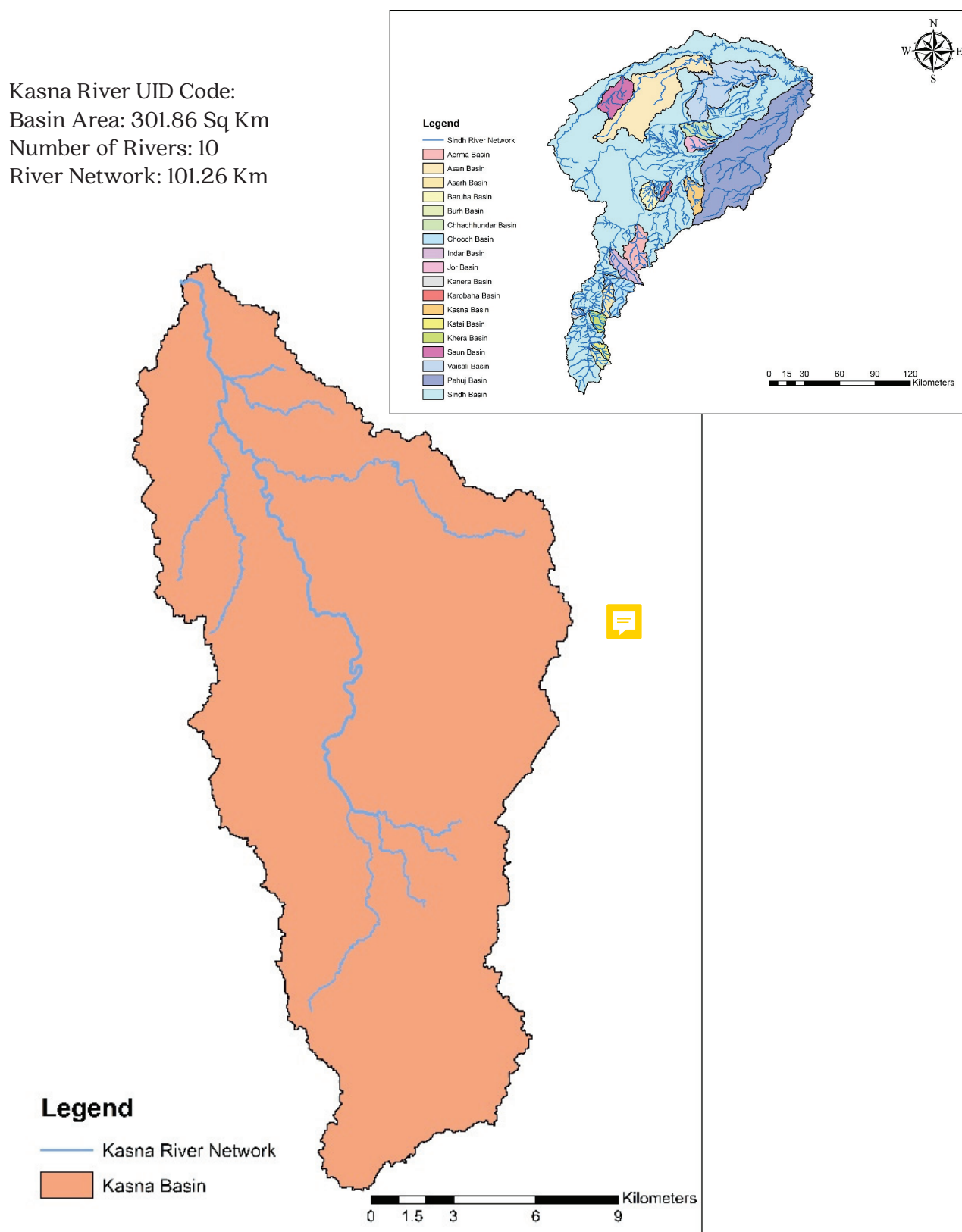


Figure: Kasna River Network

## KASNA RIVER MAINSTEM FLOW DIAGRAM

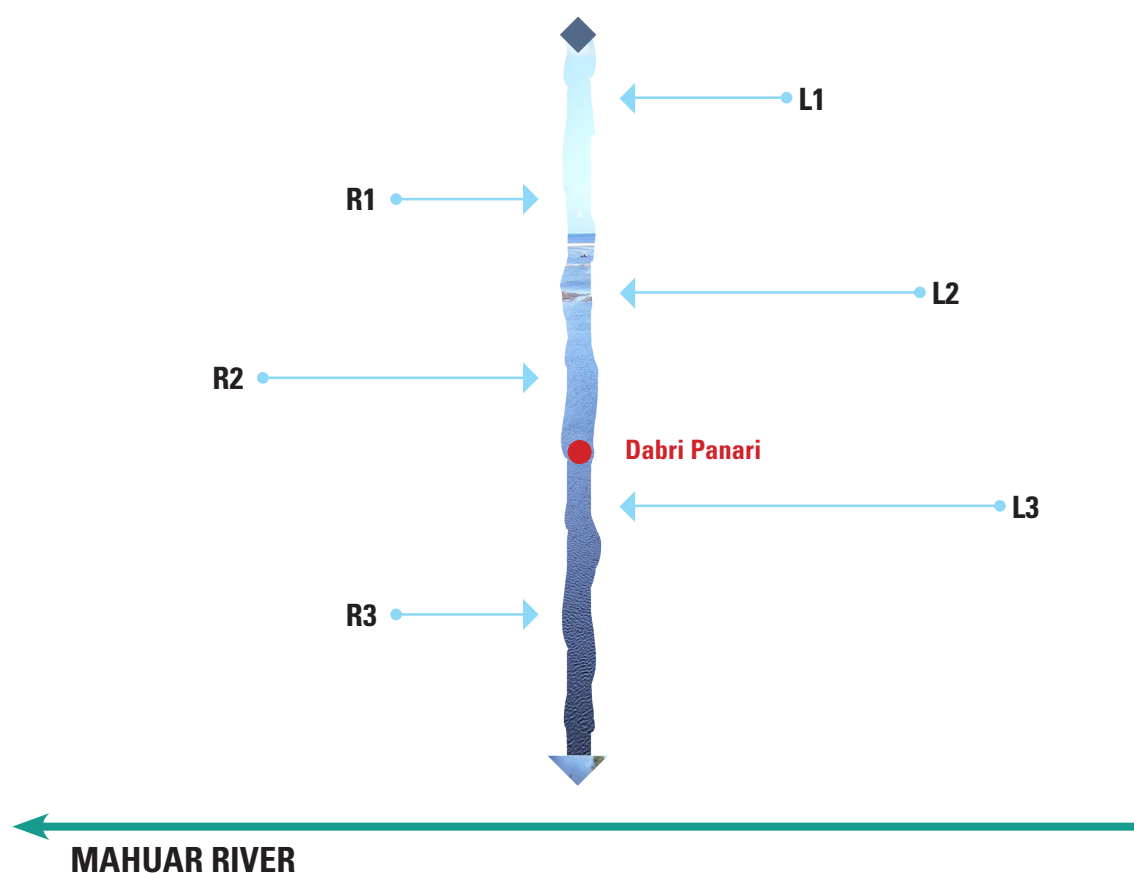


Figure: Flow Diagram of Kasna Nala

| KASNA RIVER MAINSTEM NETWORK |                |                 |                     |                        |       |                           |
|------------------------------|----------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name     | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |                |                 |                     | Lat                    | Long  |                           |
| 1                            | Nadho Nala     | L1              | 5.48                | 25.50                  | 78.32 | 0.01                      |
| 2                            | Pathoriya Nala | R1              | 4.96                | 25.50                  | 78.32 | 0.01                      |
| 3                            | Bilwa Nala     | L2              | 10.8                | 25.50                  | 78.31 | 0.9                       |
| 4                            | Tumdhar Nala   | R2              | 17.2                | 25.62                  | 78.27 | 19.9                      |
| 5                            | Dabri Nala     | L3              | 14.5                | 25.63                  | 78.26 | 22.27                     |
| 6                            | Renwaja Nala   | R3              | 7.84                | 25.65                  | 78.26 | 24.23                     |

# KATAI BASIN AND ITS RIVER NETWORK

Katai River UID Code:  
 Basin Area: 111.57 Sq Km  
 Number of Rivers: 05  
 River Network: 68.33 Km

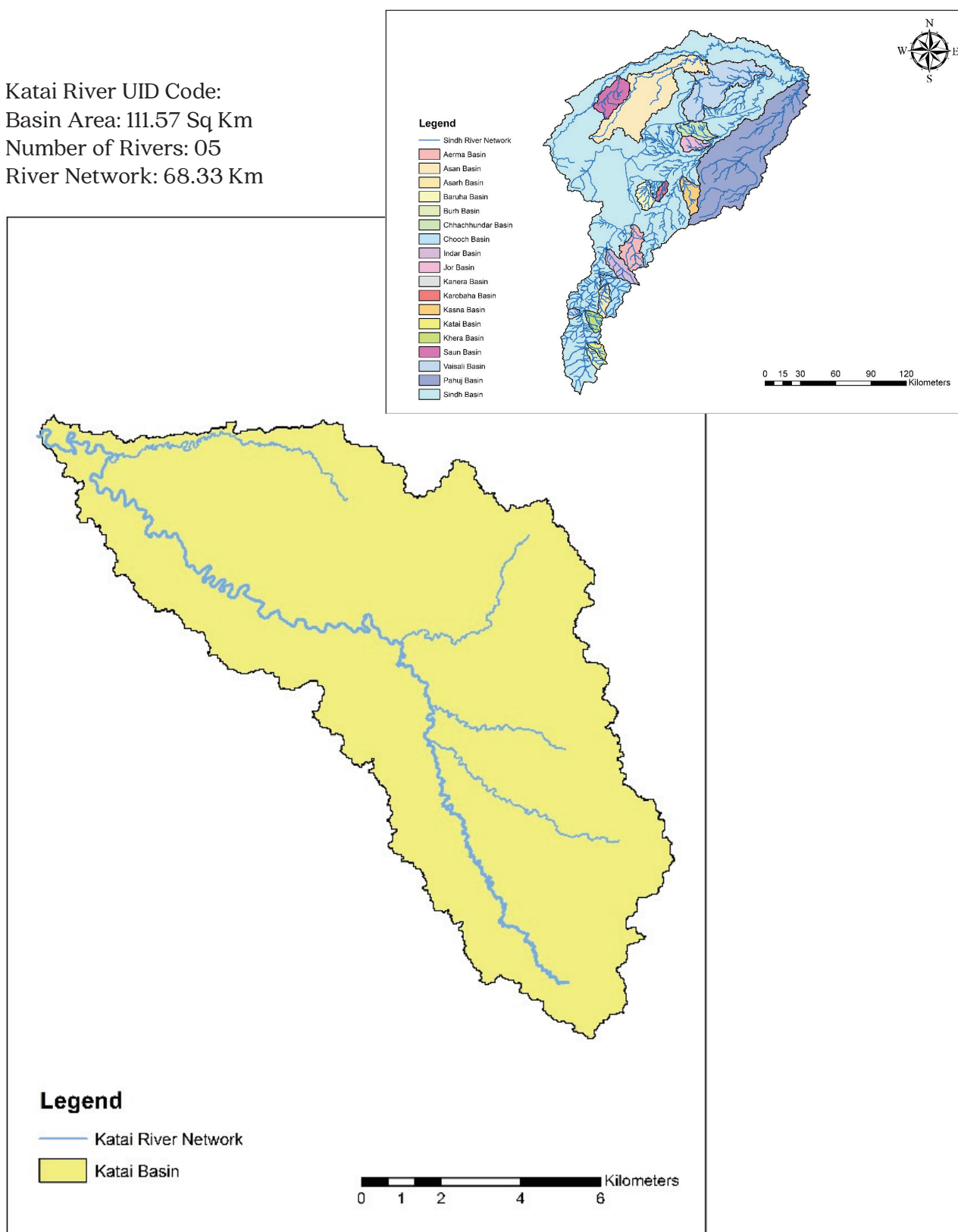


Figure: Katai River Network

## KATAI RIVER MAINSTEM FLOW DIAGRAM

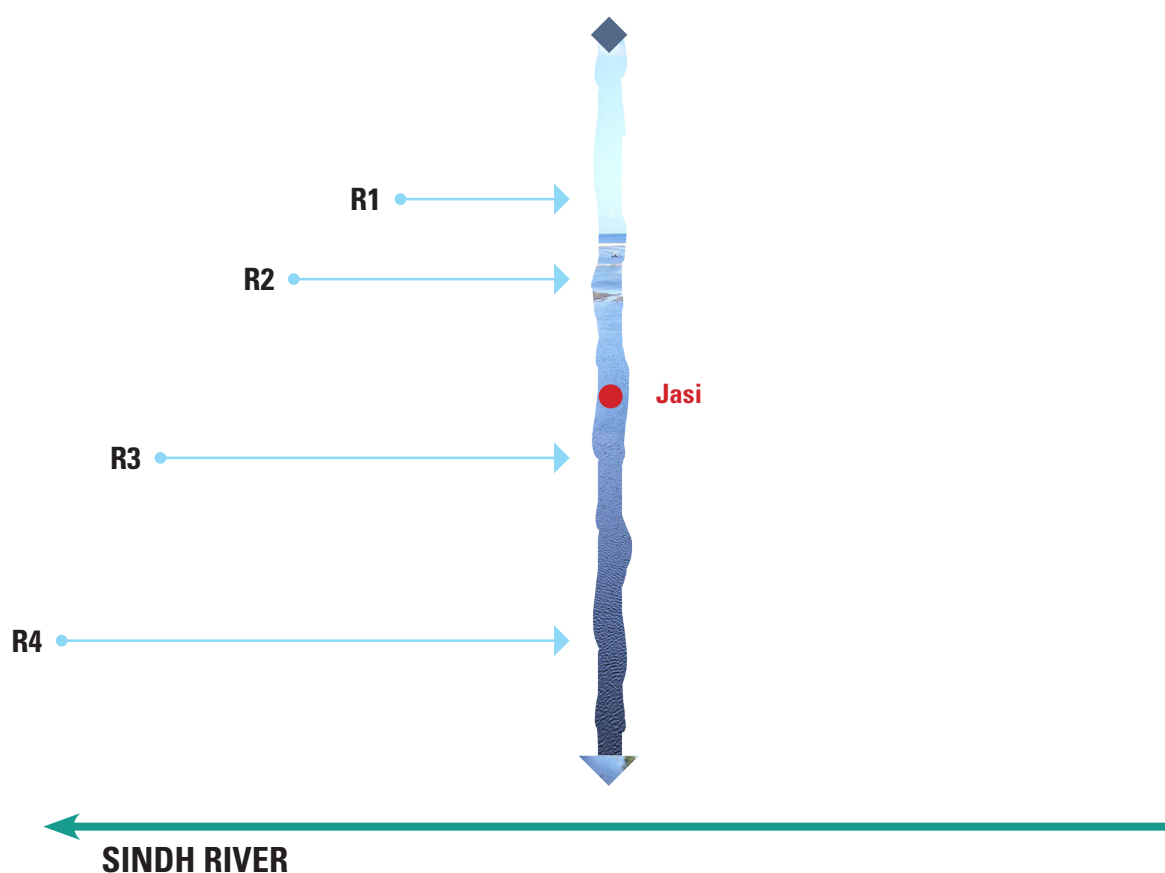


Figure: Flow Diagram of Katai Nala

| KATAI RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |            |                 |                     | Lat                    | Long  |                           |
| 1                            | Stream 2   | R1              | 7.75                | 24.34                  | 77.61 | 11.6                      |
| 2                            | Stream 3   | R2              | 5.45                | 24.35                  | 77.61 | 12.9                      |
| 3                            | Stream 4   | R3              | 7                   | 24.36                  | 77.60 | 15.5                      |
| 4                            | Stream 1   | R4              | 11                  | 24.40                  | 77.53 | 32.65                     |

# KHERA BASIN AND ITS RIVER NETWORK

Khera River UID Code:  
 Basin Area: 171.72 Sq Km  
 Number of Rivers: 10  
 River Network: 123.07 Km

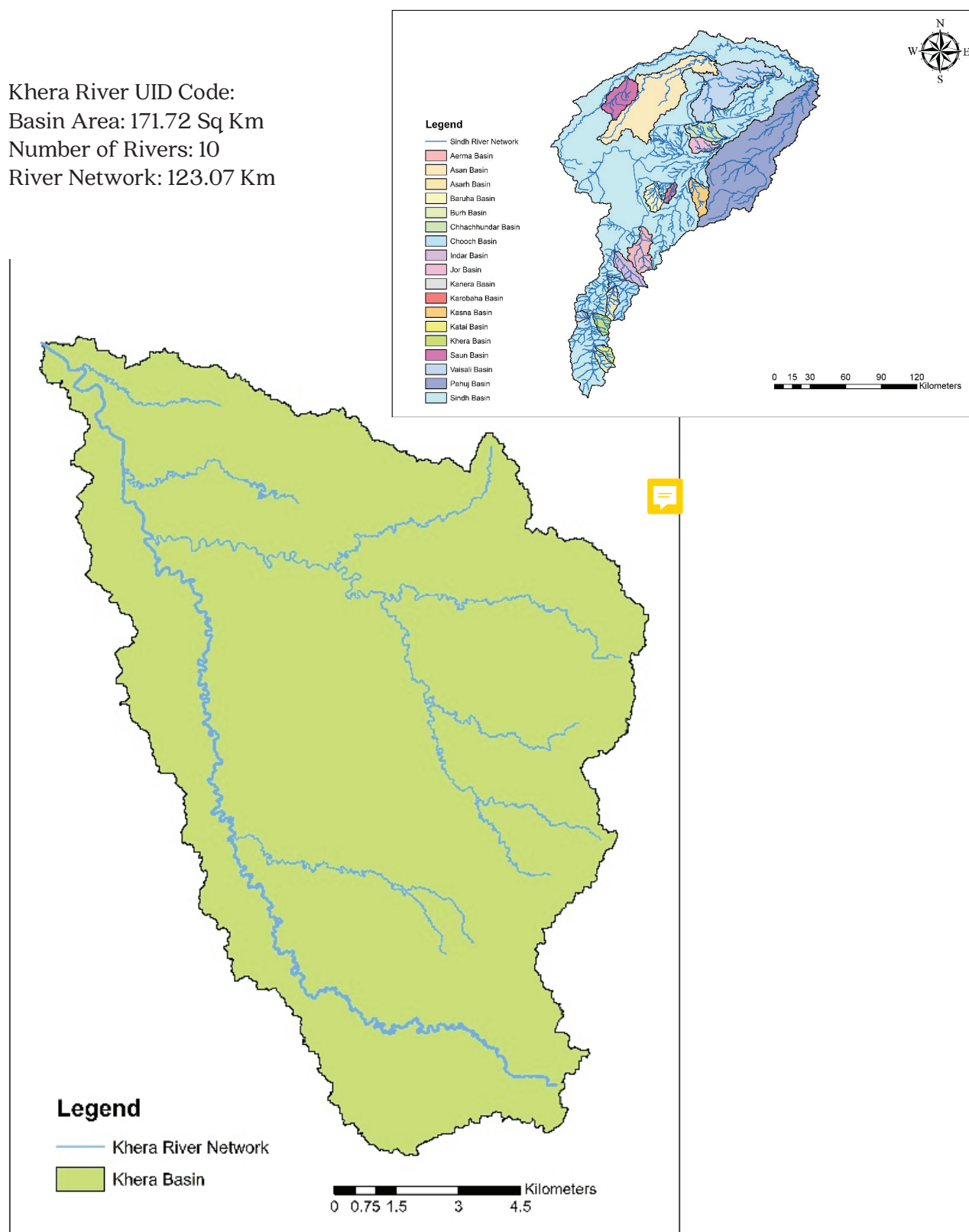


Figure: Khera River Network

## KHERA RIVER MAINSTEM FLOW DIAGRAM

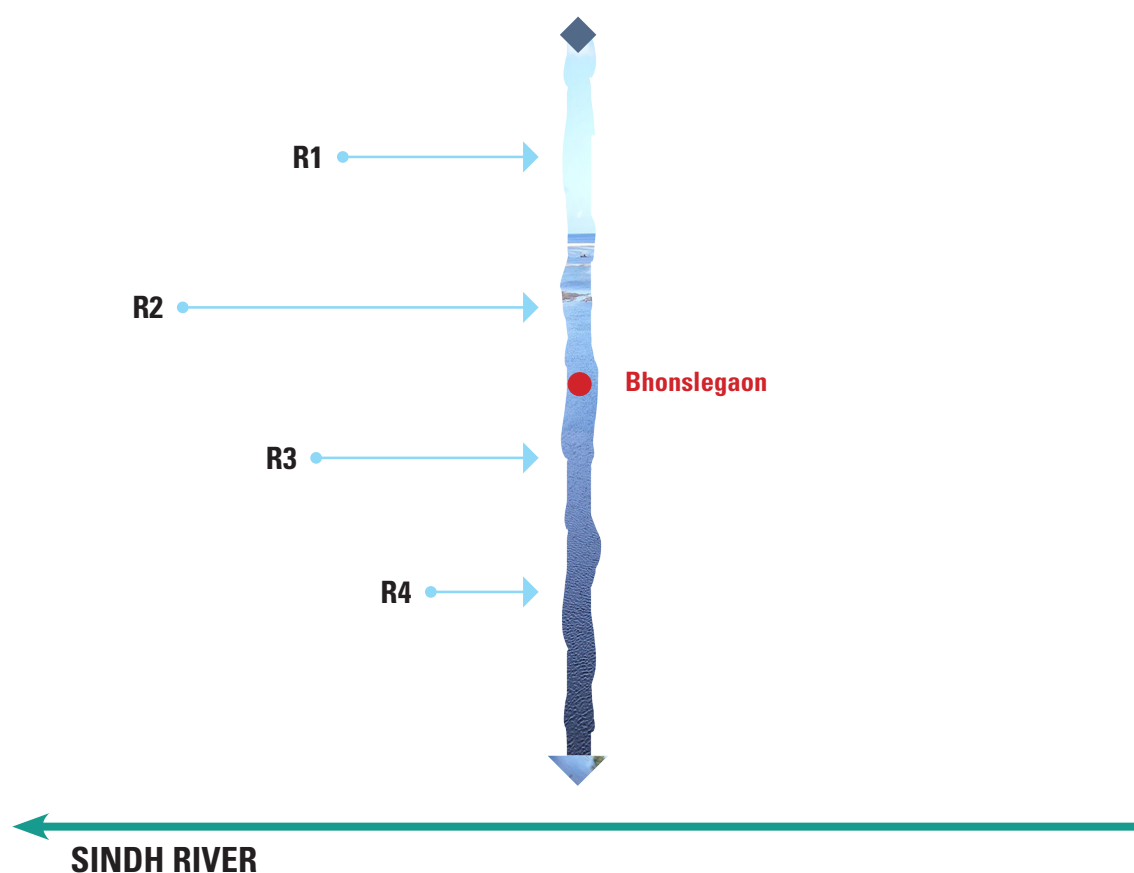


Figure: Flow Diagram of Khera River

| KHERA RIVER MAINSTEM NETWORK |            |                 |                     |                        |       |                           |
|------------------------------|------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |            |                 |                     | Lat                    | Long  |                           |
| 1                            | STREAM 4   | R1              | 10                  | 24.55                  | 77.54 | 19                        |
| 2                            | STREAM 3   | R2              | 24                  | 24.61                  | 77.52 | 32.76                     |
| 3                            | STREAM 2   | R3              | 10                  | 24.63                  | 77.51 | 34.9                      |
| 4                            | STREAM 1   | R4              | 5.9                 | 24.65                  | 77.50 | 38.78                     |

# SAUN BASIN AND ITS RIVER NETWORK

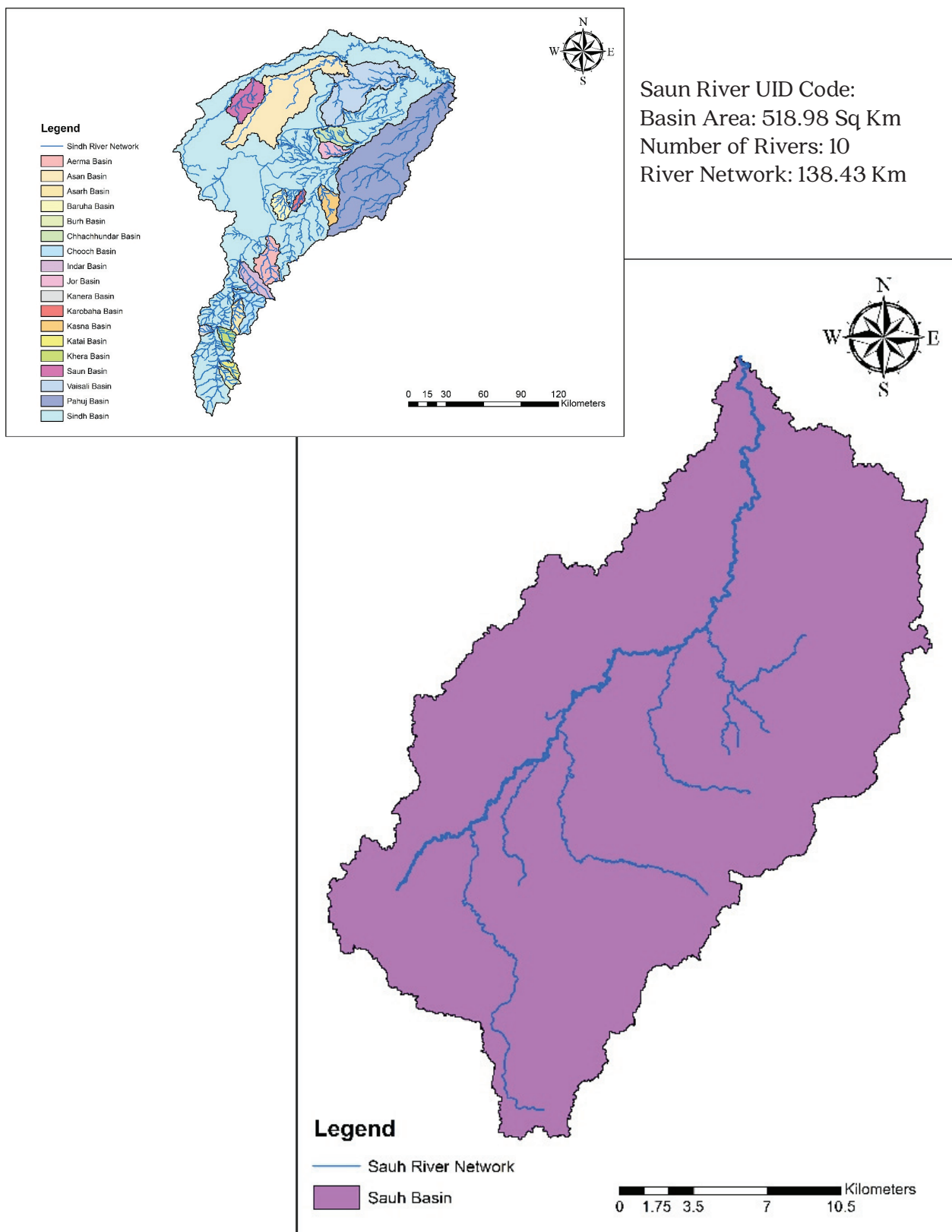


Figure: Saun River Network

## SAUN RIVER MAINSTEM FLOW DIAGRAM

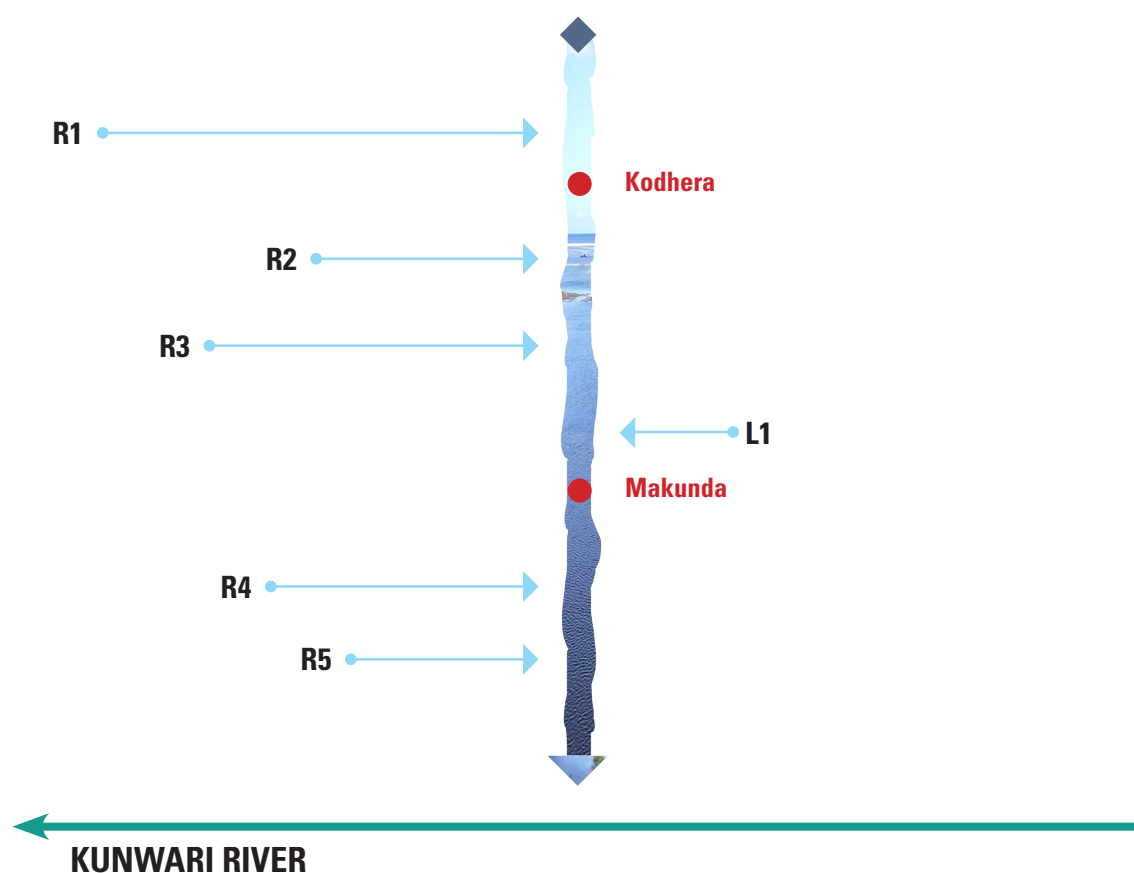


Figure: Flow Diagram of Saun River

| SAUH RIVER MAINSTEM NETWORK |                |                 |                     |                        |       |                           |
|-----------------------------|----------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                       | River Name     | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                             |                |                 |                     | Lat                    | Long  |                           |
| 1                           | Stream 01      | R1              | 20.5                | 26.24                  | 77.63 | 6.7                       |
| 2                           | Katila Nadi    | R2              | 9.31                | 26.27                  | 77.66 | 14.5                      |
| 3                           | Gurah Nadi     | R3              | 18.4                | 26.29                  | 77.67 | 17.5                      |
| 4                           | Stream 02      | L1              | 1.59                | 26.30                  | 77.68 | 18.6                      |
| 5                           | Sukhdini Nadi  | R4              | 13.4                | 26.32                  | 77.73 | 30                        |
| 6                           | Bhaunsora nala | R5              | 10.2                | 26.33                  | 77.74 | 32                        |

# PAHUJ BASIN AND ITS RIVER NETWORK

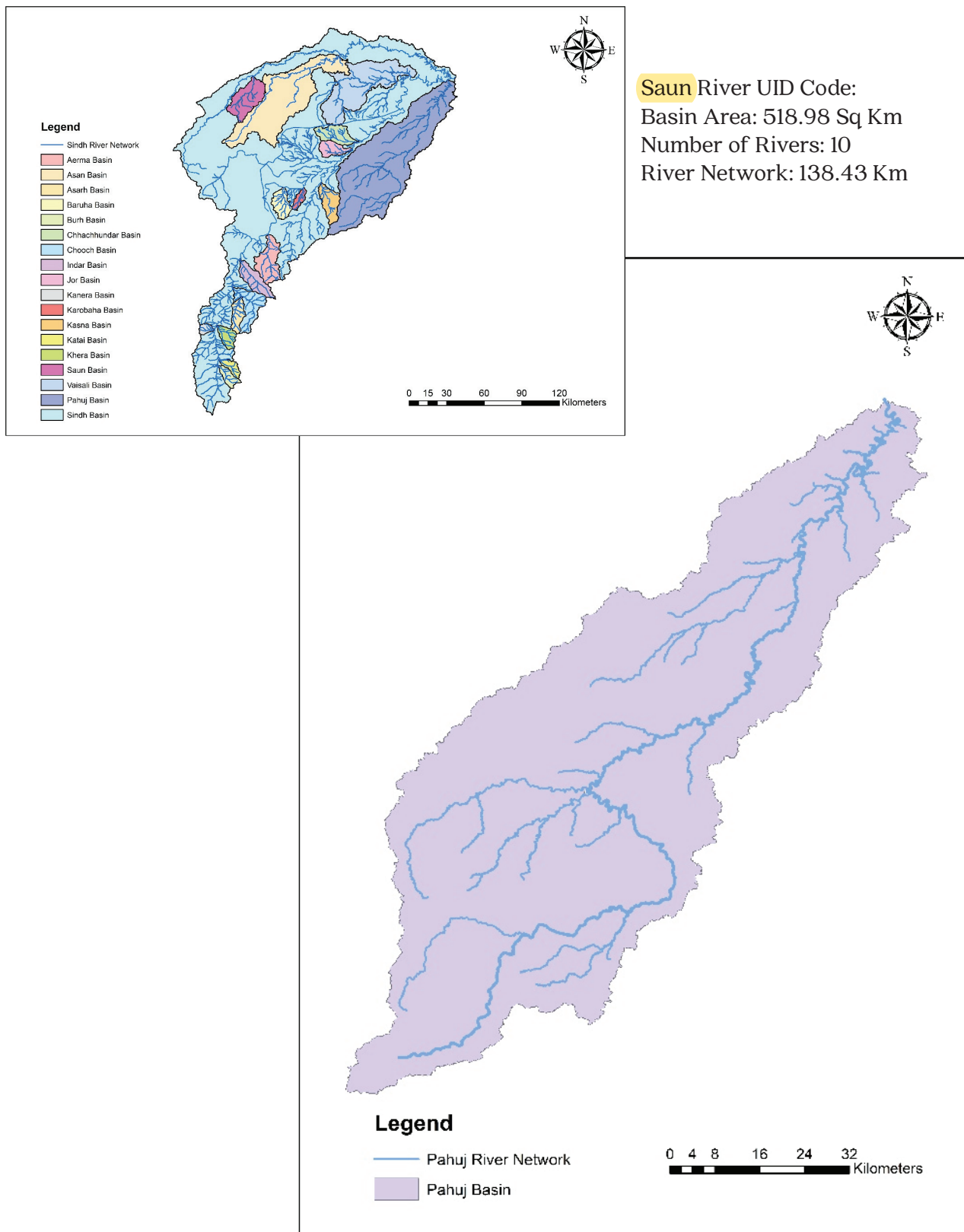


Figure: Pahuj River Network

# PAHUJ RIVER MAINSTEM FLOW DIAGRAM

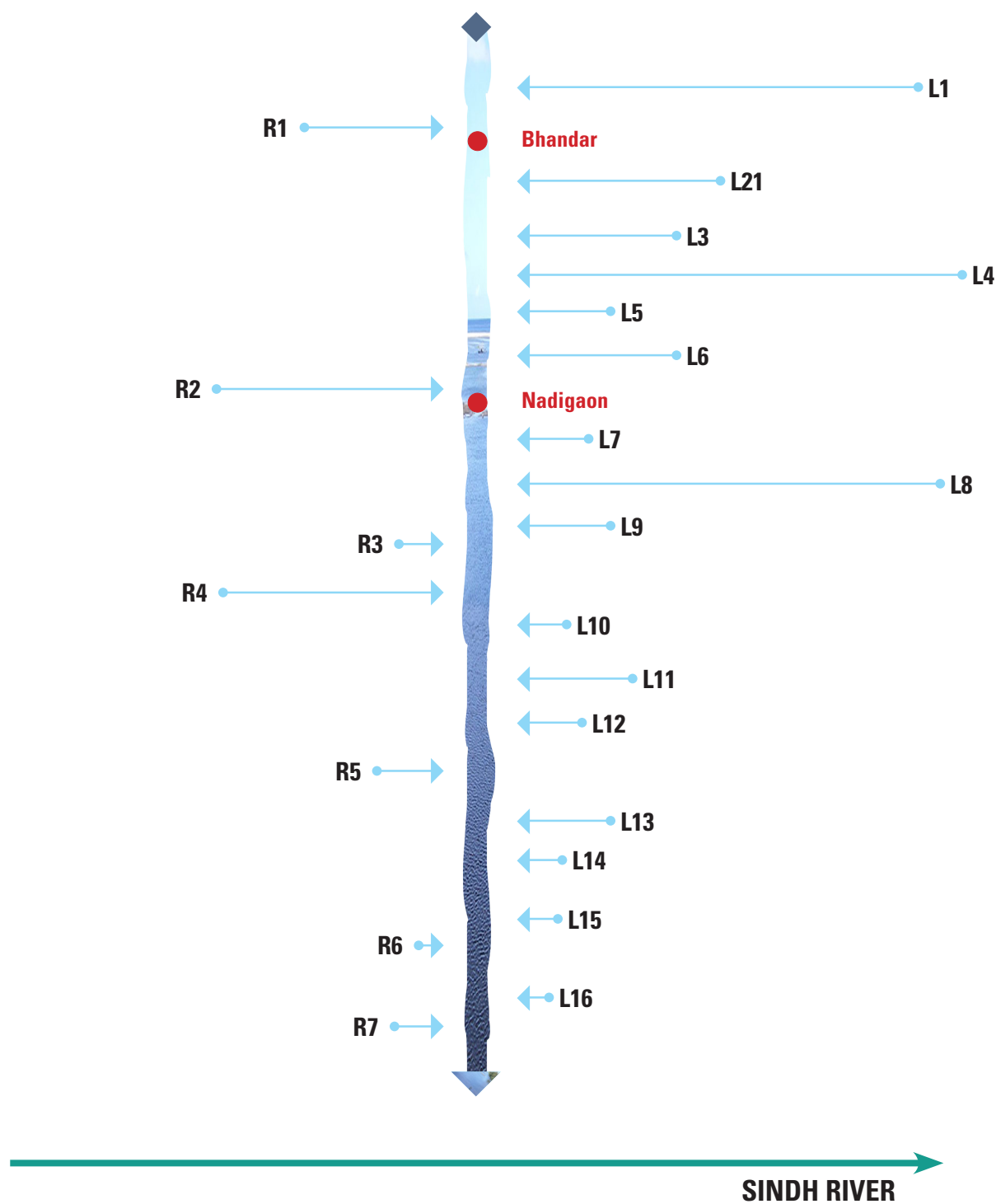


Figure: Flow Diagram of Pahuj River

| PAHUJ RIVER MAINSTEM NETWORK |                           |                 |                     |                        |       |                           |
|------------------------------|---------------------------|-----------------|---------------------|------------------------|-------|---------------------------|
| S.No.                        | River Name                | Confluence Bank | River Length ( Km ) | Confluence Co-ordinate |       | Distance from origin (km) |
|                              |                           |                 |                     | Lat                    | Long  |                           |
| 1                            | Angori Nadi (Anbhor Nadi) | L               | 40.2                | 25.44                  | 78.39 | 39.7                      |
| 2                            | Bhada Nala                | R               | 16.4                | 25.52                  | 78.72 | 63.6                      |
| 3                            | Stream 13                 | L               | 17.7                | 25.70                  | 78.66 | 96.3                      |
| 4                            | Kharaura Nala             | L               | 13.6                | 25.75                  | 78.62 | 107                       |
| 5                            | Parron Nala               | L               | 66.3                | 25.62                  | 78.42 | 108                       |
| 6                            | Stream 12                 | L               | 10.3                | 25.82                  | 78.63 | 112                       |
| 7                            | Chakora Nala              | L               | 18.7                | 25.87                  | 78.66 | 129                       |
| 8                            | Laraiyakhar Nala          | R               | 19.8                | 25.79                  | 78.84 | 141                       |
| 9                            | Stream 11                 | L               | 4.84                | 26.08                  | 78.98 | 185                       |
| 10                           | Mirga Nadi                | L               | 62.2                | 25.96                  | 78.68 | 197                       |
| 11                           | Khar Nala                 | L               | 4                   | 26.19                  | 79.01 | 203                       |
| 12                           | Stream 10                 | R               | 3                   | 26.21                  | 79.05 | 208                       |
| 13                           | Bhadaiyan Nala            | R               | 14.4                | 26.16                  | 79.10 | 213                       |
| 14                           | Stream 9                  | L               | 4.81                | 26.26                  | 79.06 | 215                       |
| 15                           | Narel Nala                | L               | 7.72                | 26.29                  | 79.04 | 216                       |
| 16                           | Stream 8                  | L               | 5.15                | 26.30                  | 79.06 | 220                       |
| 17                           | Stream 7                  | R               | 4.56                | 26.28                  | 79.12 | 231                       |
| 18                           | Stream 6                  | L               | 5.72                | 26.34                  | 79.09 | 236                       |
| 19                           | Stream 5                  | L               | 1.92                | 26.35                  | 79.13 | 239                       |
| 20                           | Stream 4                  | L               | 3.39                | 26.38                  | 79.14 | 245                       |
| 21                           | Stream 3                  | R               | 1.77                | 26.37                  | 79.18 | 248                       |
| 22                           | Stream 2                  | L               | 1.15                | 26.38                  | 79.16 | 248.3                     |
| 23                           | Stream 1                  | R               | 2.96                | 26.37                  | 79.19 | 249                       |

# VAISALI BASIN AND ITS RIVER NETWORK

Vaisali River UID Code:  
 Basin Area: 1590.86 Sq Km  
 Number of Rivers: 20  
 River Network: 369.55 Km

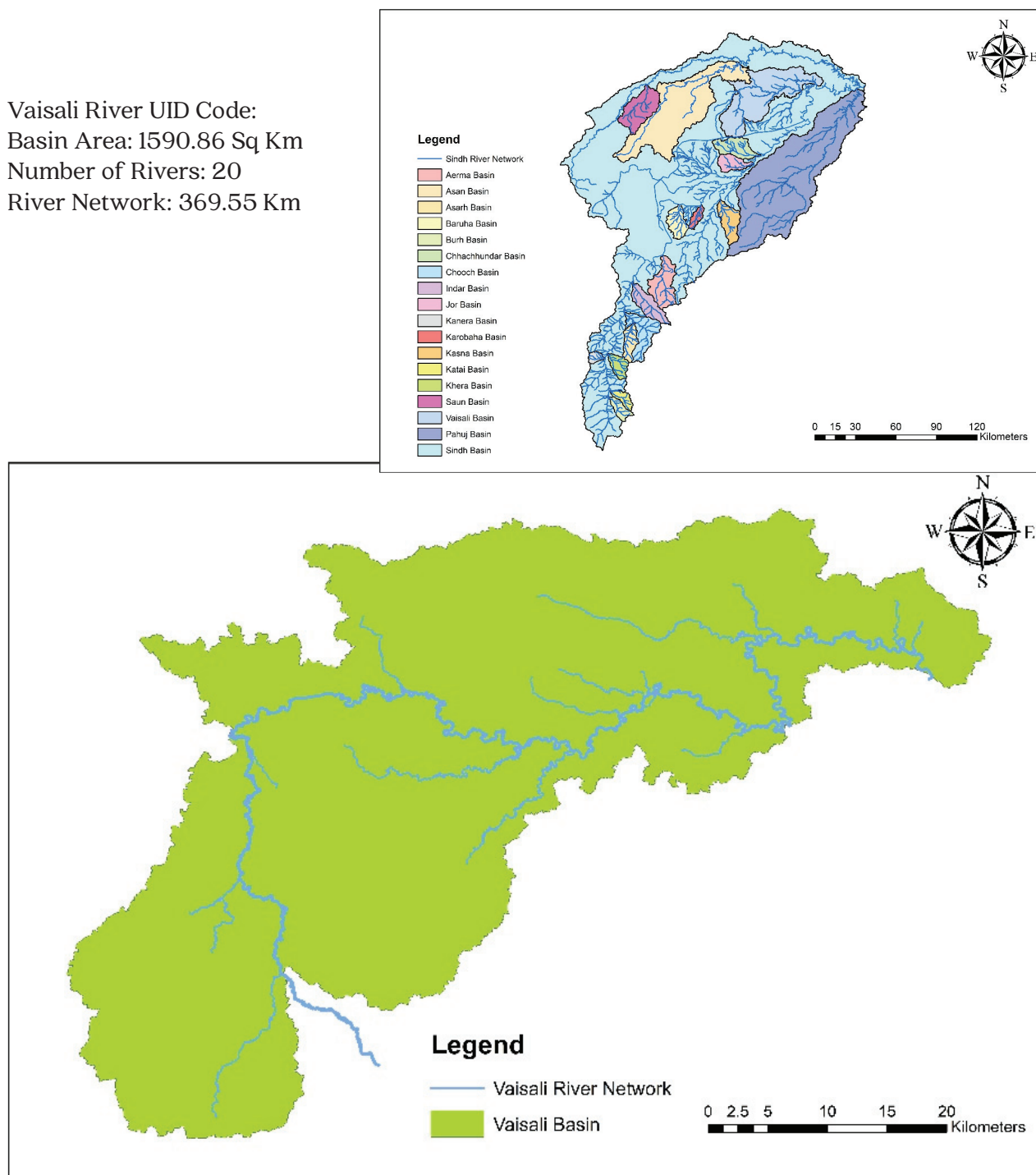


Figure: Vaisali River Network



# **APPENDIX I**

## **RIVER UNIQUE IDENTITY CODES**



## SINDH BASIN: DETAILS OF RIVERS

| S. No | River          | River Code | Origin      |             | Destination |             | Con-fluecne with    | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|----------------|------------|-------------|-------------|-------------|-------------|---------------------|--------------------------|---------------|-----------|--------|
|       |                |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                     |                          |               |           |        |
| 1     | Aerma Nala     |            | 24.97       | 77.84       | 25.31       | 77.86       | Sindh               | 53.3                     |               | Sindh     | Yamuna |
| 2     | Angori Nad     |            | 2526'21.86" | 7823'23.36" | 2533'33.77" | 7835'6.47"  | Pahuj River         | 40.2                     |               | Sindh     | Yamuna |
| 3     | Asan River     |            | 2558'16.17" | 7733'29.81" | 26.60       | 78.39       | Kunwari river       | 185                      |               | Sindh     | Yamuna |
| 4     | Asarh Nadi     |            | 24.61       | 77.66       | 24.86       | 77.68       | Chooch Nadi         | 46                       |               | Sindh     | Yamuna |
| 5     | Ashna Nala     |            | 26 9'29.82" | 7855'49.78" | 26 9'45.25" | 7859'31.87" | Mirga Nadi          | 8.86                     |               | Sindh     | Yamuna |
| 6     | Badhai Nadi    |            | 25.18       | 77.78       | 25.26       | 77.80       | Sindh               | 17.3                     |               | Sindh     | Yamuna |
| 7     | Bakri Ka Nala  |            | 2538'57.67" | 7834'39.03" | 2544'50.98" | 7836'59.56" | Kharaura Nala       | 19.3                     |               | Sindh     | Yamuna |
| 8     | Ban Khoh       |            | 2557'57.17" | 7757'38.57" | 2558'12.55" | 7759'8.77"  | Gobardha Khoh       | 4.94                     |               | Sindh     | Yamuna |
| 9     | Banait Nadi    |            | 24.86       | 77.84       | 24.82       | 77.75       | Chooch Nadi         | 15.5                     |               | Sindh     | Yamuna |
| 10    | Banda Nala     |            | 2546'52.98" | 7725'16.44" | 25.81       | 77.29       | Kunwari river       | 19.3                     |               | Sindh     | Yamuna |
| 11    | Bandiya Nala   |            | 24.84       | 77.61       | 24.86       | 77.58       | Motiya Nala         | 5.3                      |               | Sindh     | Yamuna |
| 12    | Bari Khon Nala |            | 26.07       | 78.33       | 26.00       | 78.36       | Ch-hachhun-dar Nadi | 11.8                     |               | Sindh     | Yamuna |
| 13    | Baruha Nadi    |            | 25.43       | 77.99       | 25.65       | 77.98       | Sindh               | 28.9                     |               | Sindh     | Yamuna |
| 14    | Barwaha Nala   |            | 26.19       | 78.72       | 26.29       | 78.71       | Saon Nadi           | 21.3                     |               | Sindh     | Yamuna |
| 15    | Barwaho Nadi   |            | 26.16       | 78.57       | 26.26       | 78.72       | Barwaha Nala        | 34.3                     |               | Sindh     | Yamuna |
| 16    | Baseri Nadi    |            | 24.93       | 77.71       | 24.94       | 77.61       | Sindh               | 18.5                     |               | Sindh     | Yamuna |
| 17    | Basil Nadi     |            | 26.15       | 78.48       | 26.44       | 78.89       | Sindh               | 192                      |               | Sindh     | Yamuna |
| 18    | Bhada Nala     |            | 2531'20.66" | 7842'57.07" | 2535'56.99" | 7845'0.28"  | Pahuj River         | 16.4                     |               | Sindh     | Yamuna |
| 19    | Bhadaiyan Nala |            | 26 9'41.74" | 79 5'59.64" | 2614'48.87" | 79 5'4.59"  | Pahuj River         | 14.4                     |               | Sindh     | Yamuna |
| 20    | Bhadauna Nadi  |            | 26.11       | 78.35       | 26.22       | 78.40       | Basil Nadi          | 18.3                     |               | Sindh     | Yamuna |
| 21    | Bhaunsora nala |            | 2616'43.91" | 7745'16.75" | 26.33       | 77.74       | Sauh (Saun Nadi)    | 10.2                     |               | Sindh     | Yamuna |

| S. No | River              | River Code | Origin      |             | Destination |             | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|--------------------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |                    |            | Latitude    | Longitude   | Latitude    | Longitude   |                  |                          |               |           |        |
| 22    | Bilrai Nala        |            | 25.31       | 78.25       | 25.56       | 78.18       | Mahuar Nadi      | 39.5                     |               | Sindh     | Yamuna |
| 23    | Bilwa Nala         |            | 25.44       | 78.29       | 25.50       | 78.31       | Kasna Nala       | 10.8                     |               | Sindh     | Yamuna |
| 24    | Burh Nadi          |            | 24.27       | 77.64       | 24.37       | 77.50       | Sindh            | 31.5                     |               | Sindh     | Yamuna |
| 25    | Chakora Nala       |            | 2552'10.91" | 7839'36.34" | 2552'44.45" | 7847'21.71" | Pahuj River      | 18.7                     |               | Sindh     | Yamuna |
| 26    | Chaumasiya Nadi    |            | 25.20       | 77.95       | 25.26       | 78.02       | Mahuar Nadi      | 12.4                     |               | Sindh     | Yamuna |
| 27    | Chhachhund-ar Nadi |            | 26.05       | 78.21       | 25.97       | 78.51       | Sindh            | 42.2                     |               | Sindh     | Yamuna |
| 28    | Chhan Ki Nadi      |            | 25.38       | 77.96       | 25.40       | 78.03       | Mahuar Nadi      | 10.6                     |               | Sindh     | Yamuna |
| 29    | Chinaur Nadi       |            | 2558'9.03"  | 78 5'18.22" | 2553'22.13" | 7810'44.04" | Larma Nala       | 20.2                     |               | Sindh     | Yamuna |
| 30    | Chooch Nadi        |            | 24.62       | 77.72       | 24.93       | 77.61       | Sindh            | 71                       |               | Sindh     | Yamuna |
| 31    | Dabri Nala         |            | 25.56       | 78.26       | 25.63       | 78.26       | Kasna Nala       | 14.5                     |               | Sindh     | Yamuna |
| 32    | Dharma Jaro Nala   |            | 24.91       | 77.52       | 24.87       | 77.56       | Sindh            | 9.5                      |               | Sindh     | Yamuna |
| 33    | Dundai Nadi        |            | 25.52       | 78.02       | 25.64       | 78.03       | Sindh            | 15.8                     |               | Sindh     | Yamuna |
| 34    | Ghar Ghat Ka Nala  |            | 2539'6.84"  | 7829'31.89" | 2544'51.01" | 7836'59.70" | Kharaura Nala    | 26.5                     |               | Sindh     | Yamuna |
| 35    | Ghonchi Nala       |            | 25.13       | 77.59       | 25.12       | 77.65       | Sindh            | 12.3                     |               | Sindh     | Yamuna |
| 36    | Ghonghi Nala       |            | 2530'0.27"  | 7834'17.81" | 2532'13.80" | 7842'9.96"  | Karina Nala      | 21.5                     |               | Sindh     | Yamuna |
| 37    | Ghura Nala         |            | 24.68       | 77.43       | 24.66       | 77.50       | Sindh            | 9.74                     |               | Sindh     | Yamuna |
| 38    | Gobardha Khoh      |            | 2557'10.05" | 7756'18.02" | 2558'6.29"  | 7759'19.30" | Mata khoh        | 7.43                     |               | Sindh     | Yamuna |
| 39    | Gomti Nala         |            | 24.66       | 77.41       | 24.62       | 77.46       | Kanera Nadi      | 11.5                     |               | Sindh     | Yamuna |
| 40    | Gurah Nadi         |            | 2613'7.20"  | 7744'45.97" | 26.29       | 77.67       | Sauh (Saun Nadi) | 18.4                     |               | Sindh     | Yamuna |
| 41    | Indar Nadi         |            | 24.86       | 77.90       | 25.13       | 77.66       | Sindh            | 62                       |               | Sindh     | Yamuna |
| 42    | Jamdaro Nala       |            | 2558'47.99" | 7756'3.76"  | 2557'30.86" | 78 3'48.73" | Non nadi         | 18.9                     |               | Sindh     | Yamuna |
| 43    | Jamniya Nala       |            | 25.36       | 78.03       | 25.38       | 78.04       | Mahuar Nadi      | 3.65                     |               | Sindh     | Yamuna |

| S. No | River         | River Code | Origin      |             | Destination |             | Con-fluence with   | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|---------------|------------|-------------|-------------|-------------|-------------|--------------------|--------------------------|---------------|-----------|--------|
|       |               |            | Latitude    | Longitude   | Latitude    | Longitude   |                    |                          |               |           |        |
| 44    | Jamra Nala    |            | 2448'22.35" | 7728'16.52" | 2448'13.67" | 7730'11.09" | Niwari Nadi        | 5.85                     |               | Sindh     | Yamuna |
| 45    | Jhinni Nala   |            | 26.06       | 78.37       | 25.98       | 78.44       | Ch-hachhundar Nadi | 15.8                     |               | Sindh     | Yamuna |
| 46    | Jhirna Nala   |            | 2520'59.92" | 7814'42.95" | 2522'5.18"  | 7814'14.78" | Kurrao Nadi        | 2.79                     |               | Sindh     | Yamuna |
| 47    | Jor Nala      |            | 25.89       | 78.29       | 25.92       | 78.47       | Sindh              | 33.9                     |               | Sindh     | Yamuna |
| 48    | Kachucha Nala |            | 2640'45.02" | 7826'58.51" | 26.67       | 78.46       | Kunwari river      | 1.79                     |               | Sindh     | Yamuna |
| 49    | Kahrhai Nala  |            | 26 4'37.75" | 7848'31.08" | 26 8'14.55" | 7857'49.34" | Mirga Nadi         | 62.2                     |               | Sindh     | Yamuna |
| 50    | Kahria Nala   |            | 2424'41.87" | 7724'29.54" | 2429'47.34" | 7725'58.16" | Senduwa Nadi       | 18.3                     |               | Sindh     | Yamuna |
| 51    | Kala Nala     |            | 26.30       | 78.54       | 26.39       | 78.62       | Basil Nadi         | 26.4                     |               | Sindh     | Yamuna |
| 52    | Kamain Nadi   |            | 26.50       | 78.59       | 26.47       | 78.76       | Basil Nadi         | 28.4                     |               | Sindh     | Yamuna |
| 53    | Kanera Nadi   |            | 24.63       | 77.38       | 24.63       | 77.48       | Sindh              | 15.7                     |               | Sindh     | Yamuna |
| 54    | Karhai Nadi   |            | 25.26       | 77.98       | 25.32       | 78.01       | Mahuar Nadi        | 9.33                     |               | Sindh     | Yamuna |
| 55    | Karina Nala   |            | 2532'13.62" | 7842'9.42"  | 2532'39.13" | 7843'6.85"  | Bhada Nala         | 3.8                      |               | Sindh     | Yamuna |
| 56    | Karobaha Nadi |            | 25.49       | 78.05       | 25.64       | 78.12       | Sindh              | 27.3                     |               | Sindh     | Yamuna |
| 57    | Kasna Nala    |            | 25.50       | 78.32       | 25.68       | 78.24       | Mahuar Nadi        | 29                       |               | Sindh     | Yamuna |
| 58    | Katai Nala    |            | 24.28       | 77.64       | 24.41       | 77.51       | Sindh              | 37                       |               | Sindh     | Yamuna |
| 59    | Katila Nadi   |            | 2613'13.81" | 7739'22.58" | 26.27       | 77.66       | Sauh (Saun Nadi)   | 9.31                     |               | Sindh     | Yamuna |
| 60    | Khar Nala     |            | 2611'27.74" | 79 0'30.43" | 2612'25.52" | 79 1'31.89" | Pahuj River        |                          |               | Sindh     | Yamuna |
| 61    | Kharaura Nala |            | 2544'51.38" | 7837'0.26"  | 2547'23.71" | 7840'55.01" | Pahuj River        | 13.6                     |               | Sindh     | Yamuna |
| 62    | Khaunna Nala  |            | 25.54       | 78.25       | 25.60       | 78.21       | Mahuar Nadi        | 14                       |               | Sindh     | Yamuna |
| 63    | Kher Nadi     |            | 26.51       | 78.74       | 26.47       | 78.77       | Basil Nadi         | 9.27                     |               | Sindh     | Yamuna |
| 64    | Khera Nadi    |            | 24.50       | 77.62       | 24.66       | 77.49       | Sindh              | 40                       |               | Sindh     | Yamuna |
| 65    | Kheri Ka Nala |            | 2537'55.42" | 7829'12.79" | 2539'29.32" | 7830'38.99" | Ghar Ghat Ka Nala  | 6.45                     |               | Sindh     | Yamuna |
| 66    | Khirai nala   |            | 25.31       | 77.56       | 25.28       | 77.75       | Sindh              | 24.6                     |               | Sindh     | Yamuna |

| S. No | River            | River Code | Origin      |             | Destination |             | Con-fluence with   | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------------|------------|-------------|-------------|-------------|-------------|--------------------|--------------------------|---------------|-----------|--------|
|       |                  |            | Latitude    | Longitude   | Latitude    | Longitude   |                    |                          |               |           |        |
| 67    | Khod Ka Nala     |            | 24.59       | 77.43       | 24.61       | 77.48       | Sindh              | 10.1                     |               | Sindh     | Yamuna |
| 68    | Koyala Nala      |            | 2522'31.47" | 7813'6.84"  | 2523'54.32" | 7813'39.54" | Bilrai Nala        | 3.51                     |               | Sindh     | Yamuna |
| 69    | Kunwari River    |            | 2544'24.81" | 7722'11.14" | 2625'49.71" | 7911'10.30" | Sindh              | 429                      |               | Sindh     | Yamuna |
| 70    | Kurrao Nadi      |            | 2518'28.89" | 7813'45.79" | 2523'12.93" | 7814'33.53" | Bilrai Nala        | 13                       |               | Sindh     | Yamuna |
| 71    | Larai Nala       |            | 26.07       | 78.41       | 26.03       | 78.40       | Jhinni Nala        | 7.1                      |               | Sindh     | Yamuna |
| 72    | Laraiyakhar Nala |            | 2547'11.65" | 7850'37.29" | 2553'50.41" | 7852'19.50" | Pahuj River        |                          |               | Sindh     | Yamuna |
| 73    | Larma Nala       |            | 26 0'54.61" | 7812'9.65"  | 2551'33.97" | 7811'23.55" | Non nadi           | 32                       |               | Sindh     | Yamuna |
| 74    | Lirma Nala       |            | 25.96       | 78.34       | 25.90       | 78.41       | Jor Nala           | 18.3                     |               | Sindh     | Yamuna |
| 75    | Madar Nadi       |            | 25.00       | 77.82       | 25.16       | 77.86       | Aerma Nala         | 28                       |               | Sindh     | Yamuna |
| 76    | Mahuar nadi      |            | 24.98       | 77.97       | 25.79       | 78.30       | Sindh              | 130                      |               | Sindh     | Yamuna |
| 77    | Maingra Nadi     |            | 26 1'5.02"  | 78 6'48.07" | 2553'49.57" | 7810'42.94" | Larma Nala         | 26.9                     |               | Sindh     | Yamuna |
| 78    | Mata Khoh        |            | 2556'3.53"  | 7756'46.94" | 2557'52.48" | 78 1'58.84" | Jamdaro Nala       | 14.5                     |               | Sindh     | Yamuna |
| 79    | Maura nala       |            | 25.31       | 77.61       | 25.32       | 77.62       | Khirai Nala        | 1.5                      |               | Sindh     | Yamuna |
| 80    | Mirga Nadi       |            | 2557'32.96" | 7841'2.20"  | 2610'29.96" | 79 1'9.35"  | Pahuj River        | 62.2                     |               | Sindh     | Yamuna |
| 81    | Mohiya Nala      |            | 24.89       | 77.77       | 24.84       | 77.73       | Chooch Nadi        | 13.5                     |               | Sindh     | Yamuna |
| 82    | Morar Nadi       |            | 26.07       | 78.26       | 26.40       | 78.36       | Basil Nadi         | 58.5                     |               | Sindh     | Yamuna |
| 83    | Morkuri Nadi     |            | 26.13       | 78.50       | 26.20       | 78.41       | Basil Nadi         | 20.5                     |               | Sindh     | Yamuna |
| 84    | Motiya Nala      |            | 24.82       | 77.60       | 24.88       | 77.58       | Sindh              | 13.6                     |               | Sindh     | Yamuna |
| 85    | Nadho Nala       |            | 25.47       | 78.33       | 25.50       | 78.32       | Kasna Nala         | 5.48                     |               | Sindh     | Yamuna |
| 86    | Narai Nala       |            | 25.49       | 78.03       | 25.55       | 77.99       | Baruha Nadi        | 10.5                     |               | Sindh     | Yamuna |
| 87    | Narel Nala       |            | 2617'10.32" | 79 2'32.70" | 2616'13.04" | 79 4'58.71" | Pahuj River        | 7.72                     |               | Sindh     | Yamuna |
| 88    | Narhikhar Nala   |            | 25.44       | 78.02       | 25.47       | 78.13       | Mahuar Nadi        | 16.2                     |               | Sindh     | Yamuna |
| 89    | Narkhara Nala    |            | 2549'5.30"  | 78 6'2.23"  | 2551'18.12" | 7810'44.80" | Sukha Nadi         | 12.9                     |               | Sindh     | Yamuna |
| 90    | Narkhara Nala    |            | 26.04       | 78.30       | 26.00       | 78.33       | Ch-hachhundar Nadi | 8.28                     |               | Sindh     | Yamuna |

| S. No | River            | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |                  |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 91    | Niwari Nadi      |            | 2439'50.73" | 7723'23.37" | 2449'17.22" | 7731'18.61" | Sindh River      | 33                       |               | Sindh     | Yamuna |
| 92    | Non              |            | 26 3'37.46" | 78 3'52.52" | 2549'54.37" | 7821'48.15" | Sindh            | 66.5                     |               | Sindh     | Yamuna |
| 93    | Orakhar Nala     |            | 25.29       | 77.62       | 25.32       | 77.65       | Khirai Nala      | 6.11                     |               | Sindh     | Yamuna |
| 94    | Paduri Nala      |            | 25.56       | 78.00       | 25.58       | 78.03       | Dundai Nadi      | 4.64                     |               | Sindh     | Yamuna |
| 95    | Pahuj River      |            | 2521'47.87" | 7822'34.03" | 2625'14.43" | 79 9'22.08" | Sindh            | 259                      |               | Sindh     | Yamuna |
| 96    | Palko Nala       |            | 24.89       | 77.81       | 24.96       | 77.79       | Indar Nadi       | 15.7                     |               | Sindh     | Yamuna |
| 97    | Panha Jharo Nala |            | 2453'29.46" | 7730'26.56" | 2451'34.44" | 7732'55.37" | Sindh            | 10                       |               | Sindh     | Yamuna |
| 98    | Pania Nala       |            | 2444'22.49" | 7723'27.36" | 2444'23.79" | 7727'2.21"  | Niwari Nadi      | 10                       |               | Sindh     | Yamuna |
| 99    | Panihanghat Nala |            | 25.58       | 78.02       | 25.60       | 78.03       | Dundai Nadi      | 3                        |               | Sindh     | Yamuna |
| 100   | Par Nadi         |            | 2535'15.17" | 7727'57.52" | 2543'30.28" | 7731'21.53" | Parbati Nadi     | 44.7                     |               | Sindh     | Yamuna |
| 101   | Parara Nala      |            | 2528'53.10" | 7835'49.76" | 2532'13.77" | 7842'9.70"  | Karina Nala      | 21                       |               | Sindh     | Yamuna |
| 102   | Pararia Nala     |            | 2442'43.67" | 7728'2.59"  | 2446'32.09" | 7728'25.19" | Niwari Nadi      | 12.7                     |               | Sindh     | Yamuna |
| 103   | Parbati Nadi     |            | 2529'20.42" | 7732'57.87" | 2546'38.26" | 7815'27.79" | Sindh            | 166                      |               | Sindh     | Yamuna |
| 104   | Paronch Nadi     |            | 25.18       | 78.10       | 25.40       | 78.10       | Mahuar Nadi      | 33.5                     |               | Sindh     | Yamuna |
| 105   | Parwav Nala      |            | 2556'16.45" | 7825'59.06" | 2557'4.81"  | 7828'58.66" | Sindh            | 8.49                     |               | Sindh     | Yamuna |
|       | Parron Nala      |            | 2537'17.12" | 7825'23.36" | 2548'0.66"  | 7841'2.48"  | Pahuj River      | 66.3                     |               | Sindh     | Yamuna |
| 107   | Patapura Nala    |            | 25.01       | 77.95       | 25.08       | 77.88       | Aerma Nala       | 15.9                     |               | Sindh     | Yamuna |
| 108   | Patariya Nadi    |            | 25.13       | 78.08       | 25.17       | 78.04       | Mahuar Nadi      | 7.97                     |               | Sindh     | Yamuna |
| 109   | Pathoriya Nala   |            | 25.49       | 78.35       | 25.50       | 78.32       | Kasna Nala       | 4.96                     |               | Sindh     | Yamuna |
| 110   | Patwa Nala       |            | 2427'15.09" | 7734'43.34" | 2426'44.44" | 7730'27.60" | Sindh            | 14.3                     |               | Sindh     | Yamuna |
| 111   | Piprodha Nala    |            | 2547'45.48" | 7730'4.35"  | 2547'37.71" | 7733'40.89" | Parbati Nadi     | 10.1                     |               | Sindh     | Yamuna |
| 112   | Piriya Nala      |            | 2449'23.26" | 7728'11.54" | 2450'12.29" | 7731'24.58" | Sindh            | 9.6                      |               | Sindh     | Yamuna |
| 113   | Popta Nala       |            | 25.19       | 77.80       | 25.25       | 77.79       | Badhai Nadi      | 13.4                     |               | Sindh     | Yamuna |

| S. No | River        | River Code | Origin      |             | Destination |             | Con-fluecne with        | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|--------------|------------|-------------|-------------|-------------|-------------|-------------------------|--------------------------|---------------|-----------|--------|
|       |              |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                         |                          |               |           |        |
| 114   | Renwaja Nala |            | 25.63       | 78.30       | 25.65       | 78.26       | Kasna Nala              | 7.84                     |               | Sindh     | Yamuna |
| 115   | Sankh Nadi   |            | 2613'23.45" | 7759'51.12" | 26.50       | 78.16       | Asan River              | 53.8                     |               | Sindh     | Yamuna |
| 116   | Saon Nadi    |            | 26.14       | 78.55       | 26.41       | 78.79       | Basil Nadi              | 76.6                     |               | Sindh     | Yamuna |
| 117   | Sauh         |            | 2613'2.71"  | 7735'55.55" | 26.45       | 77.76       | Kunwari river           | 53.2                     |               | Sindh     | Yamuna |
| 118   | Senduwa Nadi |            | 2433'21.25" | 7729'0.86"  | 2434'15.89" | 7729'8.92"  | Sindh                   | 40.9                     |               | Sindh     | Yamuna |
| 119   | Silaiya Nadi |            | 25.27       | 78.21       | 25.43       | 78.13       | Mahuar Nadi             | 27.2                     |               | Sindh     | Yamuna |
| 120   | Sindh River  |            | 24.05       | 77.43       | 26.44       | 79.21       | Yamuna                  | 516                      |               | Sindh     | Yamuna |
| 121   | Sonya Nala   |            | 2540'38.91" | 7816'57.19" | 2542'43.10" | 7818'2.25"  | Sonya Nala (Somia Nala) | 7.94                     |               | Sindh     | Yamuna |
| 122   | Sonya Nala   |            | 2537'43.32" | 7820'0.29"  | 2547'45.57" | 7820'48.23" | Sindh                   | 36.3                     |               | Sindh     | Yamuna |
| 123   | Stream 01    |            | 25.55       | 78.15       | 25.54       | 78.16       | Stream 05               | 2.42                     |               | Sindh     | Yamuna |
| 124   | Stream 01    |            | 25.73       | 78.24       | 25.75       | 78.28       | Mahuar Nadi             | 5.95                     |               | Sindh     | Yamuna |
| 125   | Stream 01    |            | 26 7'29.76" | 7740'15.92" | 26.24       | 77.63       | Sauh (Saun Nadi)        | 20.5                     |               | Sindh     | Yamuna |
| 126   | Stream 01    |            | 2616'57.01" | 7745'31.49" | 26.29       | 77.75       | Bhaunso-ra nala         | 1.63                     |               | Sindh     | Yamuna |
| 127   | Stream 01    |            | 2631'12.04" | 7823'58.04" | 26.58       | 78.38       | Asan River              | 12.6                     |               | Sindh     | Yamuna |
| 128   | Stream 01    |            | 2626'24.79" | 79 8'2.41"  | 26.44       | 79.17       | Kunwari river           | 5                        |               | Sindh     | Yamuna |
| 129   | Stream 02    |            | 25.52       | 78.14       | 25.53       | 78.15       | Stream 05               | 1.64                     |               | Sindh     | Yamuna |
| 130   | Stream 02    |            | 25.61       | 78.17       | 25.63       | 78.20       | Mahuar Nadi             | 6.71                     |               | Sindh     | Yamuna |
| 131   | Stream 02    |            | 2617'42.29" | 7740'3.34"  | 26.30       | 77.68       | Sauh (Saun Nadi)        | 1.59                     |               | Sindh     | Yamuna |
| 132   | Stream 02    |            | 2617'19.89" | 7746'24.25" | 26.31       | 77.76       | Bhaunso-ra nala         | 3.6                      |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |           | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-----------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longitude   | Latitude    | Longitude |                  |                          |               |           |        |
| 133   | Stream 02 |            | 2635'29.24" | 7821'7.55"  | 26.58       | 78.37     | Asan River       | 3.14                     |               | Sindh     | Yamuna |
| 134   | Stream 02 |            | 2626'53.23" | 79 8'44.26" | 26.45       | 79.16     | Kunwari river    | 3.27                     |               | Sindh     | Yamuna |
| 135   | Stream 03 |            | 25.53       | 78.12       | 25.53       | 78.14     | Stream 05        | 2.33                     |               | Sindh     | Yamuna |
| 136   | Stream 03 |            | 25.58       | 78.17       | 25.60       | 78.19     | Mahuar Nadi      | 3.92                     |               | Sindh     | Yamuna |
| 137   | Stream 03 |            | 2619'50.74" | 7747'22.72" | 26.31       | 77.76     | Bhaunso-ra nala  | 6.74                     |               | Sindh     | Yamuna |
| 138   | Stream 03 |            | 2634'14.46" | 7820'2.24"  | 26.57       | 78.36     | Asan River       | 5.16                     |               | Sindh     | Yamuna |
| 139   | Stream 03 |            | 2628'57.07" | 79 9'23.81" | 26.46       | 79.16     | Kunwari river    | 6.1                      |               | Sindh     | Yamuna |
| 140   | Stream 04 |            | 25.57       | 78.16       | 25.58       | 78.18     | Mahuar Nadi      | 4.25                     |               | Sindh     | Yamuna |
| 141   | Stream 04 |            | 2633'57.82" | 7821'44.01" | 26.57       | 78.36     | Asan River       | 1.64                     |               | Sindh     | Yamuna |
| 142   | Stream 04 |            | 2627'37.62" | 79 8'53.27" | 26.46       | 79.16     | Kunwari river    | 1.52                     |               | Sindh     | Yamuna |
| 143   | Stream 05 |            | 25.52       | 78.13       | 25.55       | 78.17     | Mahuar Nadi      | 8                        |               | Sindh     | Yamuna |
| 144   | Stream 05 |            | 2631'43.79" | 7819'12.81" | 26.55       | 78.34     | Asan River       | 4.7                      |               | Sindh     | Yamuna |
| 145   | Stream 05 |            | 2628'33.92" | 79 9'6.33"  | 26.47       | 79.15     | Kunwari river    | 1.58                     |               | Sindh     | Yamuna |
| 146   | Stream 06 |            | 25.52       | 78.17       | 25.54       | 78.17     | Mahuar Nadi      | 3.2                      |               | Sindh     | Yamuna |
| 147   | Stream 06 |            | 2633'42.80" | 7814'32.37" | 26.56       | 78.27     | Asan River       | 4.56                     |               | Sindh     | Yamuna |
| 148   | Stream 06 |            | 2627'18.92" | 79 7'43.79" | 26.47       | 79.13     | Kunwari river    | 1.79                     |               | Sindh     | Yamuna |
| 149   | Stream 07 |            | 25.23       | 78.06       | 25.24       | 78.03     | Mahuar Nadi      | 3.61                     |               | Sindh     | Yamuna |
| 150   | Stream 07 |            | 2629'36.39" | 79 8'11.95" | 26.49       | 79.13     | Kunwari river    | 1.51                     |               | Sindh     | Yamuna |
| 151   | Stream 08 |            | 25.18       | 77.96       | 25.21       | 78.03     | Mahuar Nadi      | 13.2                     |               | Sindh     | Yamuna |
| 152   | Stream 08 |            | 2629'58.39" | 79 7'43.25" | 26.49       | 79.13     | Kunwari river    | 2.75                     |               | Sindh     | Yamuna |
| 153   | Stream 09 |            | 25.18       | 78.06       | 25.20       | 78.04     | Mahuar Nadi      | 5.54                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 154   | Stream 09 |            | 2629'51.06" | 79 6'52.02" | 26.49       | 79.12       | Kunwari river    | 1.42                     |               | Sindh     | Yamuna |
| 155   | Stream 1  |            | 24.26       | 77.65       | 24.27       | 77.58       | Burh Nadi        | 14                       |               | Sindh     | Yamuna |
| 156   | Stream 1  |            | 24.39       | 77.59       | 24.40       | 77.53       | Katai Nala       | 11                       |               | Sindh     | Yamuna |
| 157   | Stream 1  |            | 2428'47.06" | 7736'51.62" | 2426'44.23" | 7734'43.53" | Stream 2         | 9.28                     |               | Sindh     | Yamuna |
| 158   | Stream 1  |            | 2428'56.06" | 7734'2.22"  | 2427'4.44"  | 7731'42.69" | Patwa nala       | 9.47                     |               | Sindh     | Yamuna |
| 159   | Stream 1  |            | 24.49       | 77.55       | 24.50       | 77.51       | Stream 93        | 7.8                      |               | Sindh     | Yamuna |
| 160   | Stream 1  |            | 24.53       | 77.53       | 24.52       | 77.50       | Stream 94        | 7.1                      |               | Sindh     | Yamuna |
| 161   | Stream 1  |            | 2428'4.56"  | 7720'38.25" | 2426'39.94" | 7722'10.43" | Stream 5         | 6.2                      |               | Sindh     | Yamuna |
| 162   | Stream 1  |            | 2431'50.48" | 7722'13.41" | 2432'42.29" | 7728'24.67" | Senduwa Nadi     | 19                       |               | Sindh     | Yamuna |
| 163   | Stream 1  |            | 2432'48.43" | 7723'6.90"  | 2432'8.37"  | 7724'53.21" | Stream 1         | 5                        |               | Sindh     | Yamuna |
| 164   | Stream 1  |            | 24.65       | 77.46       | 24.62       | 77.48       | Kanera Nadi      | 5                        |               | Sindh     | Yamuna |
| 165   | Stream 1  |            | 24.53       | 77.60       | 24.54       | 77.58       | Stream 4         | 3.22                     |               | Sindh     | Yamuna |
| 166   | Stream 1  |            | 24.64       | 77.60       | 24.61       | 77.56       | Stream 3         | 8.65                     |               | Sindh     | Yamuna |
| 167   | Stream 1  |            | 24.64       | 77.54       | 24.65       | 77.50       | Stream 3         | 5.9                      |               | Sindh     | Yamuna |
| 168   | Stream 1  |            | 24.66       | 77.45       | 24.67       | 77.49       | Ghura Nala       | 6.4                      |               | Sindh     | Yamuna |
| 169   | Stream 1  |            | 2445'6.59"  | 7723'2.56"  | 2446'24.15" | 7728'16.91" | Niwari Nadi      | 16.6                     |               | Sindh     | Yamuna |
| 170   | Stream 1  |            | 2447'35.22" | 7726'40.07" | 2446'38.64" | 7727'48.82" | Stream 1         | 4.27                     |               | Sindh     | Yamuna |
| 171   | Stream 1  |            | 2443'44.13" | 7729'20.71" | 2445'20.64" | 7728'37.14" | Pararia Nala     | 5.25                     |               | Sindh     | Yamuna |
| 172   | Stream 1  |            | 2448'50.70" | 7728'1.86"  | 2448'24.95" | 7729'14.07" | Jamra Nala       | 3.3                      |               | Sindh     | Yamuna |
| 173   | Stream 1  |            | 2450'27.47" | 7727'13.77" | 2450'16.90" | 7730'21.77" | Piriya Nala      | 8.7                      |               | Sindh     | Yamuna |
| 174   | Stream 1  |            | 2452'53.15" | 7729'53.56" | 2451'31.49" | 7732'40.75" | Panha Jharo Nala | 13                       |               | Sindh     | Yamuna |
| 175   | Stream 1  |            | 24.87       | 77.60       | 24.88       | 77.58       | Motiya Nala      | 5.35                     |               | Sindh     | Yamuna |
| 176   | Stream 1  |            | 24.85       | 77.85       | 24.84       | 77.78       | Bairat Nadi      | 13                       |               | Sindh     | Yamuna |

| S. No | River    | River Code | Origin   |            | Destination |            | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|----------|------------|----------|------------|-------------|------------|------------------|--------------------------|---------------|-----------|--------|
|       |          |            | Latitude | Longi-tude | Latitude    | Longi-tude |                  |                          |               |           |        |
| 177   | Stream 1 |            | 24.73    | 77.70      | 24.75       | 77.67      | Stream 5         | 7.6                      |               | Sindh     | Yamuna |
| 178   | Stream 1 |            | 24.80    | 77.69      | 24.84       | 77.66      | Asarh Nadi       | 9.85                     |               | Sindh     | Yamuna |
| 179   | Stream 1 |            | 24.92    | 77.67      | 24.91       | 77.64      | Chooch Nadi      | 6.65                     |               | Sindh     | Yamuna |
| 180   | Stream 1 |            | 24.91    | 77.75      | 24.93       | 77.70      | Baseri Nadi      | 10                       |               | Sindh     | Yamuna |
| 181   | Stream 1 |            | 24.91    | 77.75      | 24.94       | 77.79      | Palko Nala       | 8                        |               | Sindh     | Yamuna |
| 182   | Stream 1 |            | 25.11    | 77.69      | 25.11       | 77.67      | Indar Nadi       | 4.5                      |               | Sindh     | Yamuna |
| 183   | Stream 1 |            | 25.28    | 77.70      | 25.30       | 77.72      | Khirai Nala      | 3.24                     |               | Sindh     | Yamuna |
| 184   | Stream 1 |            | 25.24    | 77.79      | 25.25       | 77.79      | Popta Nala       | 1.98                     |               | Sindh     | Yamuna |
| 185   | Stream 1 |            | 24.99    | 77.94      | 25.00       | 77.92      | Stream 6         | 3.19                     |               | Sindh     | Yamuna |
| 186   | Stream 1 |            | 25.19    | 77.92      | 25.27       | 77.88      | Aerma Nala       | 13.3                     |               | Sindh     | Yamuna |
| 187   | Stream 1 |            | 25.51    | 77.92      | 25.55       | 77.96      | Stream 6         | 8.43                     |               | Sindh     | Yamuna |
| 188   | Stream 1 |            | 25.58    | 77.94      | 25.59       | 77.97      | Stream 5         | 3.44                     |               | Sindh     | Yamuna |
| 189   | Stream 1 |            | 25.59    | 78.00      | 25.62       | 77.99      | Stream 2         | 5.14                     |               | Sindh     | Yamuna |
| 190   | Stream 1 |            | 25.62    | 77.97      | 25.64       | 77.98      | Baruha Nadi      | 2.93                     |               | Sindh     | Yamuna |
| 191   | Stream 1 |            | 25.61    | 78.00      | 25.63       | 78.02      | Stream 35        | 3.3                      |               | Sindh     | Yamuna |
| 192   | Stream 1 |            | 25.60    | 78.01      | 25.62       | 78.04      | Dundai Nadi      | 3.28                     |               | Sindh     | Yamuna |
| 193   | Stream 1 |            | 25.60    | 78.08      | 25.63       | 78.09      | Stream 32        | 4.44                     |               | Sindh     | Yamuna |
| 194   | Stream 1 |            | 25.58    | 78.12      | 25.60       | 78.11      | Stream 3         | 4.43                     |               | Sindh     | Yamuna |
| 195   | Stream 1 |            | 25.62    | 78.13      | 25.62       | 78.12      | Karobaha Nadi    | 2.6                      |               | Sindh     | Yamuna |

| S. No | River    | River Code | Origin      |             | Destination |             | Con-fluecne with       | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|----------|------------|-------------|-------------|-------------|-------------|------------------------|--------------------------|---------------|-----------|--------|
|       |          |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                        |                          |               |           |        |
| 196   | Stream 1 |            | 2545'6.30"  | 78 7'0.10"  | 2544'14.70" | 78 8'19.44" | Stream 28a             | 4                        |               | Sindh     | Yamuna |
| 197   | Stream 1 |            | 2543'3.07"  | 7727'51.33" | 2543'5.88"  | 7731'17.46" | Parbati Nadi           | 13                       |               | Sindh     | Yamuna |
| 198   | Stream 1 |            | 2544'38.64" | 7728'41.05" | 2543'4.60"  | 7730'9.85"  | Stream 1               | 5.84                     |               | Sindh     | Yamuna |
| 199   | Stream 1 |            | 2543'30.56" | 78 1'46.57" | 2545'53.45" | 78 4'19.29" | Parbati Nadi           | 10.9                     |               | Sindh     | Yamuna |
| 200   | Stream 1 |            | 25.33       | 78.08       | 25.33       | 78.11       | Paronch Nadi           | 3.44                     |               | Sindh     | Yamuna |
| 201   | Stream 1 |            | 25.27       | 78.18       | 25.31       | 78.16       | Silaiya Nadi           | 6.77                     |               | Sindh     | Yamuna |
| 202   | Stream 1 |            | 25.28       | 78.16       | 25.30       | 78.16       | Silaiya Nadi           | 3.37                     |               | Sindh     | Yamuna |
| 203   | Stream 1 |            | 25.50       | 78.35       | 25.50       | 78.33       | Pathoriya Nala         | 2.43                     |               | Sindh     | Yamuna |
| 204   | Stream 1 |            | 25.58       | 78.24       | 25.61       | 78.26       | Dabri Nala             | 5.59                     |               | Sindh     | Yamuna |
| 205   | Stream 1 |            | 25.65       | 78.28       | 25.64       | 78.26       | Renwaja Nala           | 3.43                     |               | Sindh     | Yamuna |
| 206   | Stream 1 |            | 2545'15.34" | 7818'57.90" | 2546'46.99" | 7821'57.28" | Sonya Nala(Somia Nala) | 7.37                     |               | Sindh     | Yamuna |
| 207   | Stream 1 |            | 26 3'46.38" | 78 4'41.43" | 26 2'34.36" | 78 4'12.9"  | Sukha Nadi             | 3.94                     |               | Sindh     | Yamuna |
| 208   | Stream 1 |            | 26 0'17.10" | 78 2'10.62" | 2559'22.00" | 78 3'28.44" | Stream 2               | 3.73                     |               | Sindh     | Yamuna |
| 209   | Stream 1 |            | 2559'2.66"  | 78 0'39.74" | 26 1'41.68" | 7757'59.38" | Jamdaro Nala           | 8.66                     |               | Sindh     | Yamuna |
| 210   | Stream 1 |            | 2557'36.03" | 7759'11.18" | 2557'46.99" | 78 0'15.41" | Mata khoh              | 2.29                     |               | Sindh     | Yamuna |
| 211   | Stream 1 |            | 2557'0.09"  | 78 0'51.43" | 2556'43.79" | 78 2'25.99" | Stream 3               | 3.46                     |               | Sindh     | Yamuna |
| 212   | Stream 1 |            | 2551'15.40" | 78 1'44.13" | 2551'17.84" | 78 4'14.23" | Sukha Nadi             | 5.78                     |               | Sindh     | Yamuna |
| 213   | Stream 1 |            | 2552'25.01" | 78 1'6.87"  | 2551'56.98" | 78 2'58.49" | Stream 2               | 3.97                     |               | Sindh     | Yamuna |
| 214   | Stream 1 |            | 26 1'4.79"  | 78 8'43.33" | 26 0'58.10" | 78 9'3.88"  | Stream 5               | 0.92                     |               | Sindh     | Yamuna |

| S. No | River    | River Code | Origin      |              | Destination |              | Con-fluecne with    | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|----------|------------|-------------|--------------|-------------|--------------|---------------------|--------------------------|---------------|-----------|--------|
|       |          |            | Latitude    | Longi-tude   | Latitude    | Longi-tude   |                     |                          |               |           |        |
| 215   | Stream 1 |            | 26°2'0.43"  | 78°9'58.17"  | 26°0'35.30" | 78°10'2.56"  | Stream 4            | 4.31                     |               | Sindh     | Yamuna |
| 216   | Stream 1 |            | 2557°21.31" | 78°7'17.35"  | 2554°34.99" | 78°10'3.86"  | Maingra Nadi        | 10                       |               | Sindh     | Yamuna |
| 217   | Stream 1 |            | 2557°15.44" | 78°5'2.71"   | 2557°5.68"  | 78°5'23.20"  | Chinaur nadi        | 0.72                     |               | Sindh     | Yamuna |
| 218   | Stream 1 |            | 2552°33.63" | 78°9'48.83"  | 2552°35.98" | 78°11'14.42" | Larma Nala          | 3                        |               | Sindh     | Yamuna |
| 219   | Stream 1 |            | 25.91       | 78.28        | 25.90       | 78.31        | Jor Nala            | 5.84                     |               | Sindh     | Yamuna |
| 220   | Stream 1 |            | 26.06       | 78.23        | 26.04       | 78.24        | Ch-hachhun-dar Nadi | 3.52                     |               | Sindh     | Yamuna |
| 221   | Stream 1 |            | 26.07       | 78.23        | 26.04       | 78.24        | Stream 1            | 3.34                     |               | Sindh     | Yamuna |
| 222   | Stream 1 |            | 26.07       | 78.28        | 26.06       | 78.30        | Sukha Nala          | 2.81                     |               | Sindh     | Yamuna |
| 223   | Stream 1 |            | 26.07       | 78.38        | 26.03       | 78.40        | Larai Nala          | 8.49                     |               | Sindh     | Yamuna |
| 224   | Stream 1 |            | 26.19       | 78.46        | 26.19       | 78.44        | Basil Nadi          | 2.53                     |               | Sindh     | Yamuna |
| 225   | Stream 1 |            | 26.24       | 78.35        | 26.28       | 78.36        | Stream 3            | 8.63                     |               | Sindh     | Yamuna |
| 226   | Stream 1 |            | 26.38       | 78.29        | 26.40       | 78.35        | Morar Nadi          | 11.6                     |               | Sindh     | Yamuna |
| 227   | Stream 1 |            | 26.17       | 78.49        | 26.18       | 78.50        | Saon Nadi           | 10.3                     |               | Sindh     | Yamuna |
| 228   | Stream 1 |            | 26.23       | 78.64        | 26.27       | 78.66        | Saon Nadi           | 8.94                     |               | Sindh     | Yamuna |
| 229   | Stream 1 |            | 26.16       | 78.59        | 26.21       | 78.66        | Barwaho Nadi        | 11.8                     |               | Sindh     | Yamuna |
| 230   | Stream 1 |            | 2625°32.84" | 79°7'8.49"   | 2624°32.88" | 79°7'10.56"  | Sindh               | 2.96                     |               | Sindh     | Yamuna |
| 231   | Stream 1 |            | 2559°42.64" | 7849°49.76"  | 26°3'32.82" | 7852°18.39"  | Mirga Nadi          | 11.6                     |               | Sindh     | Yamuna |
| 232   | Stream 1 |            | 2616°24.74" | 79°3'39.64"  | 2616°58.31" | 79°3'59.18"  | Narel Nala          | 1.77                     |               | Sindh     | Yamuna |
| 233   | Stream 1 |            | 2618°7.77"  | 79°8'49.96"  | 2618°27.41" | 79°7'20.98"  | Stream 7            | 4.28                     |               | Sindh     | Yamuna |
| 234   | Stream 1 |            | 2622°26.80" | 79°11'26.70" | 2622°55.87" | 79°10'10.80" | Pahuj River         | 2.96                     |               | Sindh     | Yamuna |
| 235   | Stream 1 |            | 2633°39.17" | 79°2'4.01"   | 26.55       | 79.03        | Stream 18           | 2.1                      |               | Sindh     | Yamuna |
| 236   | Stream 1 |            | 2629°53.71" | 79°8'18.54"  | 26.49       | 79.13        | Stream 8            | 1.38                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longitude   | Latitude    | Longitude   |                  |                          |               |           |        |
| 237   | Stream 10 |            | 24.73       | 77.71       | 24.76       | 77.76       | Chooch Nadi      | 10                       |               | Sindh     | Yamuna |
| 238   | Stream 10 |            | 24.63       | 77.62       | 24.67       | 77.63       | Asarh Nadi       | 7.6                      |               | Sindh     | Yamuna |
| 239   | Stream 10 |            | 25.16       | 78.00       | 25.16       | 78.03       | Mahuar Nadi      | 4.82                     |               | Sindh     | Yamuna |
| 240   | Stream 10 |            | 2549'13.14" | 7818'44.16" | 2549'43.35" | 7819'20.58" | Sukha Nadi       | 1.94                     |               | Sindh     | Yamuna |
| 241   | Stream 10 |            | 26.42       | 78.68       | 26.43       | 78.69       | Basil Nadi       | 2.26                     |               | Sindh     | Yamuna |
| 242   | Stream 10 |            | 2626'20.90" | 7856'1.93"  | 2625'45.89" | 7856'7.84"  | Sindh            | 2.58                     |               | Sindh     | Yamuna |
| 243   | Stream 10 |            | 2612'37.90" | 79 31.96"   | 2613'34.70" | 793'35.80"  | Pahuj River      | 3                        |               | Sindh     | Yamuna |
| 244   | Stream 10 |            | 2628'9.05"  | 79 6'47.44" | 26.48       | 79.11       | Kunwari river    | 2.4                      |               | Sindh     | Yamuna |
| 245   | Stream 11 |            | 24.80       | 77.84       | 24.81       | 77.75       | Chooch Nadi      | 15                       |               | Sindh     | Yamuna |
| 246   | Stream 11 |            | 25.14       | 78.01       | 25.15       | 78.03       | Mahuar Nadi      | 2.72                     |               | Sindh     | Yamuna |
| 247   | Stream 11 |            | 2626'56.57" | 7851'6.07"  | 2626'16.26" | 7852'21.61" | Sindh            | 3.68                     |               | Sindh     | Yamuna |
| 248   | Stream 11 |            | 26.39       | 78.70       | 26.41       | 78.75       | Basil Nadi       | 8.77                     |               | Sindh     | Yamuna |
| 249   | Stream 11 |            | 26 4'52.80" | 7858'52.55" | 26 5'47.24" | 79 10.05"   | Pahuj River      | 4.84                     |               | Sindh     | Yamuna |
| 250   | Stream 11 |            | 2629'18.57" | 79 6'0.93"  | 26.48       | 79.11       | Kunwari river    | 1.64                     |               | Sindh     | Yamuna |
| 251   | Stream 12 |            | 24.77       | 77.70       | 24.83       | 77.73       | Chooch Nadi      | 13.4                     |               | Sindh     | Yamuna |
| 252   | Stream 12 |            | 25.12       | 78.03       | 25.14       | 78.02       | Mahuar Nadi      | 3.23                     |               | Sindh     | Yamuna |
| 253   | Stream 12 |            | 2626'32.47" | 7850'10.63" | 2625'51.76" | 7851'30.02" | Sindh            | 4.24                     |               | Sindh     | Yamuna |
| 254   | Stream 12 |            | 26.50       | 78.86       | 26.47       | 78.87       | Basil Nadi       | 5.73                     |               | Sindh     | Yamuna |
| 255   | Stream 12 |            | 2549'16.36" | 7837'58.84" | 2548'48.82" | 7842'4.83"  | Pahuj River      | 10.3                     |               | Sindh     | Yamuna |
| 256   | Stream 12 |            | 2630'35.50" | 79 47.77"   | 26.50       | 79.07       | Kunwari river    | 3.18                     |               | Sindh     | Yamuna |
| 257   | Stream 13 |            | 2626'9.01"  | 7849'43.15" | 2625'31.72" | 7850'20.16" | Sindh            | 2.18                     |               | Sindh     | Yamuna |
| 258   | Stream 13 |            | 26.48       | 78.88       | 26.46       | 78.88       | Basil Nadi       | 4.9                      |               | Sindh     | Yamuna |
| 259   | Stream 13 |            | 2542'17.83" | 7839'38.98" | 2545'41.56" | 7843'53.66" | Pahuj River      | 17.7                     |               | Sindh     | Yamuna |
| 260   | Stream 13 |            | 2630'46.61" | 79 3'45.35" | 26.50       | 79.05       | Kunwari river    | 2.61                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 261   | Stream 14 |            | 2626'58.60" | 7848'36.43" | 2625'45.88" | 7849'24.13" | Sindh            | 3.78                     |               | Sindh     | Yamuna |
| 262   | Stream 14 |            | 2629'35.69" | 79 2'9.31"  | 26.51       | 79.05       | Kunwari river    | 3.59                     |               | Sindh     | Yamuna |
| 263   | Stream 15 |            | 2624'35.89" | 7848'43.90" | 2625'30.32" | 7849'26.86" | Sindh            | 2.87                     |               | Sindh     | Yamuna |
| 264   | Stream 15 |            | 2630'32.01" | 79 1'59.65" | 26.52       | 79.04       | Kunwari river    | 1.74                     |               | Sindh     | Yamuna |
| 265   | Stream 16 |            | 2623'13.68" | 7849'9.73"  | 2624'5.07"  | 7850'5.14"  | Sindh            | 2.67                     |               | Sindh     | Yamuna |
| 266   | Stream 16 |            | 2631'20.56" | 79 2'10.96" | 26.52       | 79.04       | Kunwari river    | 0.55                     |               | Sindh     | Yamuna |
| 267   | Stream 17 |            | 2615'59.10" | 7846'57.73" | 2616'29.02" | 7849'31.20" | Sindh            | 6.59                     |               | Sindh     | Yamuna |
| 268   | Stream 17 |            | 2631'36.20" | 79 0'0.34"  | 26.54       | 79.03       | Kunwari river    | 5.46                     |               | Sindh     | Yamuna |
| 269   | Stream 18 |            |             |             |             |             | Sindh            |                          |               | Sindh     | Yamuna |
| 270   | Stream 18 |            | 2633'7.76"  | 79 2'57.33" | 26.55       | 79.03       | Kunwari river    | 2.99                     |               | Sindh     | Yamuna |
| 271   | Stream 19 |            | 2559'53.95" | 7829'45.24" | 2559'1.77"  | 7832'45.81" | Sindh            | 8.87                     |               | Sindh     | Yamuna |
| 272   | Stream 19 |            | 2632'41.00" | 7859'25.14" | 26.55       | 79.01       | Kunwari river    | 2.37                     |               | Sindh     | Yamuna |
| 273   | Stream 2  |            | 24.26       | 77.55       | 24.28       | 77.56       | Burh Nadi        | 5.85                     |               | Sindh     | Yamuna |
| 274   | Stream 2  |            | 24.32       | 77.65       | 24.34       | 77.61       | Katai Nala       | 7.75                     |               | Sindh     | Yamuna |
| 275   | Stream 2  |            | 2425'44.82" | 7736'1.28"  | 2426'51.44" | 7734'25.96" | patwa nala       | 5.6                      |               | Sindh     | Yamuna |
| 276   | Stream 2  |            | 2430'50.78" | 7724'15.38" | 2431'29.48" | 7727'9.77"  | Senduwa Nadi     | 8.4                      |               | Sindh     | Yamuna |
| 277   | Stream 2  |            | 24.65       | 77.42       | 24.62       | 77.44       | Kanera Nadi      | 6.35                     |               | Sindh     | Yamuna |
| 278   | Stream 2  |            | 24.59       | 77.63       | 24.60       | 77.58       | Stream 3         | 10.3                     |               | Sindh     | Yamuna |
| 279   | Stream 2  |            | 24.62       | 77.56       | 24.63       | 77.51       | Stream 3         | 10                       |               | Sindh     | Yamuna |
| 280   | Stream 2  |            | 2445'31.13" | 7726'19.90" | 2445'18.44" | 7727'45.24" | Niwari Nadi      | 3.57                     |               | Sindh     | Yamuna |
| 281   | Stream 2  |            | 24.81       | 77.58       | 24.86       | 77.58       | Motiya Nala      | 9.2                      |               | Sindh     | Yamuna |
| 282   | Stream 2  |            | 24.74       | 77.66       | 24.75       | 77.66       | Stream 5         | 3.51                     |               | Sindh     | Yamuna |
| 283   | Stream 2  |            | 24.81       | 77.62       | 24.82       | 77.65       | Asarh Nadi       | 4.9                      |               | Sindh     | Yamuna |
| 284   | Stream 2  |            | 24.87       | 77.62       | 24.90       | 77.65       | Chooch Nadi      | 7.9                      |               | Sindh     | Yamuna |

| S. No | River    | River Code | Origin      |             | Destination |             | Con-fluecne with   | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|----------|------------|-------------|-------------|-------------|-------------|--------------------|--------------------------|---------------|-----------|--------|
|       |          |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                    |                          |               |           |        |
| 285   | Stream 2 |            | 24.91       | 77.75       | 24.93       | 77.70       | Baseri Nadi        | 10                       |               | Sindh     | Yamuna |
| 286   | Stream 2 |            | 24.99       | 77.69       | 25.08       | 77.69       | Indar Nadi         | 18.4                     |               | Sindh     | Yamuna |
| 287   | Stream 2 |            | 25.28       | 77.67       | 25.31       | 77.69       | Khirai Nala        | 4.61                     |               | Sindh     | Yamuna |
| 288   | Stream 2 |            | 25.21       | 77.80       | 25.24       | 77.80       | Popta Nala         | 4.85                     |               | Sindh     | Yamuna |
| 289   | Stream 2 |            | 24.98       | 77.92       | 24.99       | 77.92       | Stream 6           | 1.47                     |               | Sindh     | Yamuna |
| 290   | Stream 2 |            | 25.21       | 77.92       | 25.21       | 77.88       | Aerma Nala         | 5.26                     |               | Sindh     | Yamuna |
| 291   | Stream 2 |            | 25.57       | 77.93       | 25.57       | 77.95       | Stream 5           | 2.71                     |               | Sindh     | Yamuna |
| 292   | Stream 2 |            | 25.61       | 78.00       | 25.62       | 77.98       | Baruha Nadi        | 3.28                     |               | Sindh     | Yamuna |
| 293   | Stream 2 |            | 25.59       | 78.01       | 25.60       | 78.03       | Dundai Nadi        | 2.95                     |               | Sindh     | Yamuna |
| 294   | Stream 2 |            | 25.54       | 78.10       | 25.58       | 78.11       | Stream 3           | 7.2                      |               | Sindh     | Yamuna |
| 295   | Stream 2 |            | 25.60       | 78.12       | 25.62       | 78.12       | Karobaha Nadi      | 3                        |               | Sindh     | Yamuna |
| 296   | Stream 2 |            | 2534'20.63" | 7728'39.54" | 2540'51.25" | 7728'17.16" | Par Nadi           | 23.6                     |               | Sindh     | Yamuna |
| 297   | Stream 2 |            | 25.28       | 78.07       | 25.32       | 78.11       | Paronch Nadi       | 9.42                     |               | Sindh     | Yamuna |
| 298   | Stream 2 |            | 26 0'50.02" | 78 2'50.85" | 2559'19.44" | 78 3'31.04" | Sukha Nadi         | 4.36                     |               | Sindh     | Yamuna |
| 299   | Stream 2 |            | 2558'21.68" | 7759'45.04" | 2558'3.22"  | 78 0'44.29" | Mata khoh          | 2.2                      |               | Sindh     | Yamuna |
| 300   | Stream 2 |            | 2556'2.23"  | 78 1'6.77"  | 2556'42.46" | 78 2'32.30" | Stream 3           | 3.46                     |               | Sindh     | Yamuna |
| 301   | Stream 2 |            | 2554'26.46" | 7759'12.69" | 2551'20.30" | 78 4'18.83" | Sukha Nadi         | 15.9                     |               | Sindh     | Yamuna |
| 302   | Stream 2 |            | 26 1'19.63" | 7810'38.84" | 2559'56.38" | 7810'5.93"  | Stream 4           | 4.47                     |               | Sindh     | Yamuna |
| 303   | Stream 2 |            | 2558'56.89" | 78 7'51.47" | 2556'40.53" | 7810'20.10" | Maingra Nadi       | 8.28                     |               | Sindh     | Yamuna |
| 304   | Stream 2 |            | 2553'58.12" | 78 8'54.14" | 2553'53.91" | 78 9'46.97" | Chinaur nadi       | 1.9                      |               | Sindh     | Yamuna |
| 305   | Stream 2 |            | 2553'22.49" | 7810'8.14"  | 2553'11.30" | 7810'50.00" | Larma Nala         | 1.4                      |               | Sindh     | Yamuna |
| 306   | Stream 2 |            | 25.97       | 78.28       | 25.90       | 78.32       | Jor Nala           | 15.1                     |               | Sindh     | Yamuna |
| 307   | Stream 2 |            | 25.99       | 78.31       | 26.00       | 78.32       | Ch-hachhundar Nadi | 2.23                     |               | Sindh     | Yamuna |

| S. No | River      | River Code | Origin       |              | Destination  |              | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------|------------|--------------|--------------|--------------|--------------|------------------|--------------------------|---------------|-----------|--------|
|       |            |            | Latitude     | Longitude    | Latitude     | Longitude    |                  |                          |               |           |        |
| 308   | Stream 2   |            | 26.06        | 78.28        | 26.05        | 78.30        | Sukha Nala       | 2.82                     |               | Sindh     | Yamuna |
| 309   | Stream 2   |            | 26.05        | 78.38        | 26.03        | 78.40        | Larai Nala       | 6.29                     |               | Sindh     | Yamuna |
| 310   | Stream 2   |            | 26.21        | 78.46        | 26.19        | 78.44        | Basil Nadi       | 4                        |               | Sindh     | Yamuna |
| 311   | Stream 2   |            | 26.15        | 78.50        | 26.19        | 78.54        | Saon nadi        | 15.5                     |               | Sindh     | Yamuna |
| 312   | Stream 2   |            | 26.18        | 78.49        | 26.18        | 78.51        | Stream 2         | 2.78                     |               | Sindh     | Yamuna |
| 313   | Stream 2   |            | 26.19        | 78.69        | 26.23        | 78.70        | Barwaho Nadi     | 8.7                      |               | Sindh     | Yamuna |
| 314   | Stream 2   |            | 26°26'33.39" | 79°6'40.82"  | 26°25'17.11" | 79°6'14.86"  | Sindh            | 3.51                     |               | Sindh     | Yamuna |
| 315   | Stream 2   |            | 25°59'56.91" | 78°48'10.11" | 26°2'51.45"  | 78°50'9.64"  | Mirga Nadi       | 8.25                     |               | Sindh     | Yamuna |
| 316   | Stream 2   |            | 26°15'9.72"  | 79°0'17.03"  | 26°16'50.10" | 79°2'46.26"  | Narel Nala       | 7.12                     |               | Sindh     | Yamuna |
| 317   | Stream 2   |            | 26°13'28.23" | 79°8'35.25"  | 26°17'27.95" | 79°7'17.53"  | Stream 7         |                          |               | Sindh     | Yamuna |
| 318   | Stream 2   |            | 26°22'45.30" | 79°9'26.18"  | 26°22'33.16" | 79°9'51.32"  | Pahuj River      | 1.15                     |               | Sindh     | Yamuna |
| 319   | Stream 20  |            | 26°51'17.6"  | 78°35'49.64" | 26°4'23.59"  | 78°37'55.06" | Sindh            | 6.65                     |               | Sindh     | Yamuna |
| 320   | Stream 20  |            | 26°33'8.81"  | 79°0'6.43"   | 26.55        | 79.01        | Kunwari river    | 0.94                     |               | Sindh     | Yamuna |
| 321   | Stream 20a |            | 26°4'26.17"  | 78°31'22.98" | 26°1'28.39"  | 78°35'41.44" | Sindh            | 12.3                     |               | Sindh     | Yamuna |
| 322   | Stream 21  |            | 26°5'20.77"  | 78°36'55.85" | 26°5'6.90"   | 78°38'24.60" | Sindh            | 5.8                      |               | Sindh     | Yamuna |
| 323   | Stream 21  |            | 26°33'58.63" | 78°59'32.72" | 26.56        | 79.01        | Kunwari river    | 1.85                     |               | Sindh     | Yamuna |
| 324   | Stream 22  |            | 26°8'48.76"  | 78°41'2.57"  | 26°8'2.77"   | 78°42'42.27" | Sindh            | 5.21                     |               | Sindh     | Yamuna |
| 325   | Stream 22  |            | 26°34'27.92" | 79°0'39.98"  | 26.57        | 79.00        | Kunwari river    | 1.46                     |               | Sindh     | Yamuna |
| 326   | Stream 23  |            | 26°7'14.91"  | 78°39'45.95" | 26°6'31.85"  | 78°41'29.62" | Sindh            | 5.4                      |               | Sindh     | Yamuna |
| 327   | Stream 23  |            | 26°35'17.88" | 78°58'43.48" | 26.58        | 78.98        | Kunwari river    | 1.3                      |               | Sindh     | Yamuna |
| 328   | Stream 24  |            | 26°34'27.39" | 78°57'22.78" | 26.58        | 78.97        | Kunwari river    | 1.72                     |               | Sindh     | Yamuna |
| 329   | Stream 25  |            | 25°52'9.17"  | 78°20'20.50" | 25°51'56.15" | 78°24'37.73" | Sindh            | 9.5                      |               | Sindh     | Yamuna |
| 330   | Stream 25  |            | 26°35'31.62" | 78°58'24.81" | 26.59        | 78.97        | Kunwari river    | 0.88                     |               | Sindh     | Yamuna |
| 331   | Stream 26  |            | 25°51'52.91" | 78°23'23.72" | 25°51'28.86" | 78°24'2.82"  | Sindh            | 1.85                     |               | Sindh     | Yamuna |
| 332   | Stream 26  |            | 26°36'12.11" | 78°57'47.80" | 26.60        | 78.94        | Kunwari river    | 5.2                      |               | Sindh     | Yamuna |
| 333   | Stream 27  |            | 25°46'18.26" | 78°19'24.52" | 25°47'37.02" | 78°20'34.64" | Sindh            | 5.93                     |               | Sindh     | Yamuna |

| S. No | River      | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |            |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 334   | Stream 27  |            | 2636'47.09" | 7855'54.17" | 26.60       | 78.93       | Kunwari river    | 2.47                     |               | Sindh     | Yamuna |
| 335   | Stream 28  |            | 2545'46.36" | 7810'51.34" | 2545'13.58" | 7813'29.37" | Sindh            | 5.99                     |               | Sindh     | Yamuna |
| 336   | Stream 28  |            | 2637'31.21" | 7843'34.95" | 26.63       | 78.73       | Kunwari river    | 1.53                     |               | Sindh     | Yamuna |
| 337   | Stream 28a |            | 2544'53.11" | 78 6'0.76"  | 2544'18.59" | 7810'34.65" | Sindh            | 12.5                     |               | Sindh     | Yamuna |
| 338   | Stream 28b |            | 2541'3.67"  | 7810'37.79" | 2544'11.12" | 7812'43.66" | Sindh            | 12                       |               | Sindh     | Yamuna |
| 339   | Stream 29  |            | 2541'54.10" | 78 4'11.22" | 2541'44.81" | 78 8'32.61" | Sindh            | 13.4                     |               | Sindh     | Yamuna |
| 340   | Stream 29  |            | 2637'46.34" | 7843'20.85" | 26.64       | 78.73       | Kunwari river    | 1                        |               | Sindh     | Yamuna |
| 341   | Stream 3   |            | 24.29       | 77.60       | 24.29       | 77.57       | Burh Nadi        | 5.3                      |               | Sindh     | Yamuna |
| 342   | Stream 3   |            | 24.34       | 77.64       | 24.35       | 77.61       | Katai Nala       | 5.45                     |               | Sindh     | Yamuna |
| 343   | Stream 3   |            | 2428'33.07" | 7721'4.10"  | 2429'31.14" | 7725'13.03" | Senduwa Nadi     | 13.5                     |               | Sindh     | Yamuna |
| 344   | Stream 3   |            | 24.65       | 77.38       | 24.62       | 77.42       | Kanera Nadi      | 10.7                     |               | Sindh     | Yamuna |
| 345   | Stream 3   |            | 24.54       | 77.62       | 24.61       | 77.52       | Khera Nadi       | 24                       |               | Sindh     | Yamuna |
| 346   | Stream 3   |            | 24.58       | 77.62       | 24.58       | 77.59       | Stream 3         | 6.53                     |               | Sindh     | Yamuna |
| 347   | Stream 3   |            | 2441'51.12" | 7726'36.14" | 2444'3.36"  | 7726'47.28" | Niwari Nadi      | 6.76                     |               | Sindh     | Yamuna |
| 348   | Stream 3   |            | 24.77       | 77.68       | 24.81       | 77.65       | Asarh Nadi       | 8                        |               | Sindh     | Yamuna |
| 349   | Stream 3   |            | 24.87       | 77.63       | 24.89       | 77.65       | Chooch Nadi      | 4.9                      |               | Sindh     | Yamuna |
| 350   | Stream 3   |            | 25.04       | 77.69       | 25.06       | 77.70       | Indar Nadi       | 4.61                     |               | Sindh     | Yamuna |
| 351   | Stream 3   |            | 25.30       | 77.66       | 25.32       | 77.67       | Khira Nala       | 3.22                     |               | Sindh     | Yamuna |
| 352   | Stream 3   |            | 24.99       | 77.93       | 24.99       | 77.92       | Stream 6         | 1.48                     |               | Sindh     | Yamuna |
| 353   | Stream 3   |            | 25.17       | 77.81       | 25.18       | 77.86       | Aerma Nala       | 8.26                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin       |              | Destination  |              | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|--------------|--------------|--------------|--------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude     | Longi-tude   | Latitude     | Longi-tude   |                  |                          |               |           |        |
| 354   | Stream 3  |            | 25.61        | 77.97        | 25.62        | 77.98        | Baruha Nadi      | 1.73                     |               | Sindh     | Yamuna |
| 355   | Stream 3  |            | 25.53        | 78.02        | 25.54        | 78.03        | Dundai Nadi      | 3.51                     |               | Sindh     | Yamuna |
| 356   | Stream 3  |            | 25.56        | 78.13        | 25.60        | 78.11        | Karobaha Nadi    | 9.23                     |               | Sindh     | Yamuna |
| 357   | Stream 3  |            | 25°57'34.24" | 78°0'29.70"  | 25°57'47.69" | 78°1'6.78"   | Mata khoh        | 1.5                      |               | Sindh     | Yamuna |
| 358   | Stream 3  |            | 25°57'23.13" | 78°1'9.27"   | 25°56'55.08" | 78°2'53.39"  | Stream 3         | 4                        |               | Sindh     | Yamuna |
| 359   | Stream 3  |            | 25°51'43.11" | 78°4'32.06"  | 25°51'21.33" | 78°4'54.42"  | Sukha Nadi       | 1.91                     |               | Sindh     | Yamuna |
| 360   | Stream 3  |            | 25°59'46.28" | 78°10'50.36" | 25°58'21.27" | 78°10'26.81" | Maingra Nadi     | 3.48                     |               | Sindh     | Yamuna |
| 361   | Stream 3  |            | 25.91        | 78.35        | 25.89        | 78.36        | Jor Nala         | 2.7                      |               | Sindh     | Yamuna |
| 362   | Stream 3  |            | 26.07        | 78.32        | 26.04        | 78.32        | Sukha Nala       | 4.23                     |               | Sindh     | Yamuna |
| 363   | Stream 3  |            | 26.27        | 78.33        | 26.29        | 78.37        | Basil Nadi       | 7.51                     |               | Sindh     | Yamuna |
| 364   | Stream 3  |            | 26.19        | 78.49        | 26.19        | 78.51        | Stream 2         | 2.63                     |               | Sindh     | Yamuna |
| 365   | Stream 3  |            | 26°27'14.44" | 79°5'17.81"  | 26°25'37.14" | 79°5'16.33"  | Sindh            | 4.73                     |               | Sindh     | Yamuna |
| 366   | Stream 3  |            | 26°22'4.95"  | 79°10'38.25" | 26°22'23.59" | 79°10'4.46"  | Pahuj River      | 1.77                     |               | Sindh     | Yamuna |
| 367   | Stream 30 |            | 26°39'24.20" | 78°43'19.15" | 26.64        | 78.73        | Kunwari river    | 2.6                      |               | Sindh     | Yamuna |
| 368   | Stream 31 |            | 25.67        | 78.11        | 25.66        | 78.12        | Sindh            | 1.66                     |               | Sindh     | Yamuna |
| 369   | Stream 31 |            | 26°40'47.52" | 78°39'59.31" | 26.66        | 78.66        | Kunwari river    | 3.66                     |               | Sindh     | Yamuna |
| 370   | Stream 32 |            | 25.61        | 78.06        | 25.64        | 78.10        | Sindh            | 6.21                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 371   | Stream 32 |            | 2639'7.35"  | 7839'39.28" | 26.66       | 78.66       | Kunwari river    | 1.33                     |               | Sindh     | Yamuna |
| 372   | Stream 33 |            | 2638'54.87" | 7837'39.88" | 26.65       | 78.63       | Kunwari river    | 1.84                     |               | Sindh     | Yamuna |
| 373   | Stream 34 |            | 2639'30.18" | 7837'34.17" | 26.65       | 78.62       | Kunwari river    | 1.6                      |               | Sindh     | Yamuna |
| 374   | Stream 35 |            | 25.60       | 78.00       | 25.64       | 78.03       | Sindh            | 6.12                     |               | Sindh     | Yamuna |
| 375   | Stream 35 |            | 2638'37.28" | 7836'54.69" | 26.65       | 78.62       | Kunwari river    | 1.98                     |               | Sindh     | Yamuna |
| 376   | Stream 36 |            | 2639'12.38" | 7836'9.09"  | 26.66       | 78.61       | Kunwari river    | 1.75                     |               | Sindh     | Yamuna |
| 377   | Stream 37 |            | 25.23       | 77.85       | 25.27       | 77.80       | Sindh            | 10.8                     |               | Sindh     | Yamuna |
| 378   | Stream 37 |            | 2640'36.94" | 7835'34.60" | 26.67       | 78.59       | Kunwari river    | 2.37                     |               | Sindh     | Yamuna |
| 379   | Stream 38 |            | 25.14       | 77.71       | 25.18       | 77.68       | Sindh            | 8.55                     |               | Sindh     | Yamuna |
| 380   | Stream 38 |            | 2638'12.55" | 7832'23.01" | 26.65       | 78.56       | Kunwari river    | 4.56                     |               | Sindh     | Yamuna |
| 381   | Stream 39 |            | 24.88       | 77.87       | 25.14       | 77.66       | Sindh            | 54.6                     |               | Sindh     | Yamuna |
| 382   | Stream 3a |            | 261'45.68"  | 7811'25.38" | 2559'36.30" | 78 9'59.92" | Maingra Nadi     | 8                        |               | Sindh     | Yamuna |
| 383   | Stream 4  |            | 24.33       | 77.59       | 24.33       | 77.55       | Burh Nadi        | 9.27                     |               | Sindh     | Yamuna |
| 384   | Stream 4  |            | 24.39       | 77.63       | 24.36       | 77.60       | Katai Nala       | 7                        |               | Sindh     | Yamuna |
| 385   | Stream 4  |            | 2425'43.37" | 7724'29.83" | 2426'50.98" | 7723'14.41" | Senduwa Nadi     | 5.58                     |               | Sindh     | Yamuna |
| 386   | Stream 4  |            | 24.53       | 77.59       | 24.55       | 77.54       | Khera Nadi       | 10                       |               | Sindh     | Yamuna |
| 387   | Stream 4  |            | 24.55       | 77.63       | 24.56       | 77.60       | Stream 3         | 4.5                      |               | Sindh     | Yamuna |
| 388   | Stream 4  |            | 2440'15.24" | 7724'28.30" | 2443'14.12" | 7725'34.61" | Niwari Nadi      | 10.4                     |               | Sindh     | Yamuna |
| 389   | Stream 4  |            | 24.78       | 77.66       | 24.81       | 77.65       | Asarh Nadi       | 6.2                      |               | Sindh     | Yamuna |
| 390   | Stream 4  |            | 24.90       | 77.71       | 24.89       | 77.65       | Chooch Nadi      | 8.9                      |               | Sindh     | Yamuna |
| 391   | Stream 4  |            | 24.93       | 77.74       | 24.97       | 77.78       | Indar Nadi       | 11                       |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin       |              | Destination  |              | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|--------------|--------------|--------------|--------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude     | Longitude    | Latitude     | Longitude    |                  |                          |               |           |        |
| 392   | Stream 4  |            | 25.37        | 77.61        | 25.32        | 77.66        | Khirai Nala      | 9.6                      |               | Sindh     | Yamuna |
| 393   | Stream 4  |            | 25.04        | 77.85        | 25.08        | 77.88        | Aerma Nala       | 8                        |               | Sindh     | Yamuna |
| 394   | Stream 4  |            | 25.58        | 77.91        | 25.61        | 77.97        | Baruha Nadi      | 10                       |               | Sindh     | Yamuna |
| 395   | Stream 4  |            | 25.54        | 78.05        | 25.55        | 78.04        | Dundai Nadi      | 2.1                      |               | Sindh     | Yamuna |
| 396   | Stream 4  |            | 25.50        | 78.04        | 25.54        | 78.08        | Karobaha Nadi    | 8.64                     |               | Sindh     | Yamuna |
| 397   | Stream 4  |            | 25°54'52.24" | 78°3'31.41"  | 25°55'3.24"  | 78°5'42.95"  | Sukha Nadi       | 6.1                      |               | Sindh     | Yamuna |
| 398   | Stream 4  |            | 25°47'44.07" | 78°1'23.62"  | 25°50'56.06" | 78°6'29.00"  | Sukha Nadi       | 17.2                     |               | Sindh     | Yamuna |
| 399   | Stream 4  |            | 25°55'32.71" | 78°12'9.42"  | 25°55'19.20" | 78°11'33.34" | Larma Nala       | 1.59                     |               | Sindh     | Yamuna |
| 400   | Stream 4  |            | 26°4'15.24"  | 78°9'45.74"  | 25°59'39.80" | 78°9'59.01"  | Maingra Nadi     | 14.2                     |               | Sindh     | Yamuna |
| 401   | Stream 4  |            | 26.02        | 78.32        | 26.01        | 78.34        | Sukha Nala       | 2.94                     |               | Sindh     | Yamuna |
| 402   | Stream 4  |            | 26.36        | 78.40        | 26.39        | 78.38        | Basil Nadi       | 4.43                     |               | Sindh     | Yamuna |
| 403   | Stream 4  |            | 26.15        | 78.51        | 26.19        | 78.54        | Stream 2         | 1.43                     |               | Sindh     | Yamuna |
| 404   | Stream 4  |            | 26°25'39.13" | 79°4'35.03"  | 26°25'4.85"  | 79°5'4.15"   | Sindh            | 1.76                     |               | Sindh     | Yamuna |
| 405   | Stream 4  |            | 26°22'37.75" | 79°8'22.43"  | 26°21'41.51" | 79°9'12.77"  | Pahuj River      | 3.39                     |               | Sindh     | Yamuna |
| 406   | Stream 40 |            | 26°41'27.37" | 78°28'34.94" | 26.68        | 78.48        | Kunwari river    | 2.1                      |               | Sindh     | Yamuna |
| 407   | Stream 41 |            | 25.10        | 77.60        | 25.09        | 77.63        | Sindh            | 8.78                     |               | Sindh     | Yamuna |
| 408   | Stream 41 |            | 26°41'42.37" | 78°28'17.12" | 26.68        | 78.47        | Kunwari river    | 2.71                     |               | Sindh     | Yamuna |
| 409   | Stream 42 |            | 25.05        | 77.65        | 25.08        | 77.63        | Sindh            | 5.29                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 410   | Stream 42 |            | 2636'19.05" | 7826'49.12" | 26.61       | 78.44       | Kunwari river    | 1.83                     |               | Sindh     | Yamuna |
| 411   | Stream 43 |            | 25.11       | 77.64       | 25.12       | 77.65       | Sindh            | 3.18                     |               | Sindh     | Yamuna |
| 412   | Stream 43 |            | 2636'5.08"  | 7826'25.85" | 26.61       | 78.44       | Kunwari river    | 1.27                     |               | Sindh     | Yamuna |
| 413   | Stream 44 |            | 25.07       | 77.65       | 25.09       | 77.64       | Sindh            | 4.17                     |               | Sindh     | Yamuna |
| 414   | Stream 44 |            | 2635'9.71"  | 7826'8.04"  | 26.59       | 78.42       | Kunwari river    | 2.52                     |               | Sindh     | Yamuna |
| 415   | Stream 45 |            | 25.05       | 77.63       | 25.05       | 77.62       | Sindh            | 2.34                     |               | Sindh     | Yamuna |
| 416   | Stream 45 |            | 2634'14.10" | 7825'19.74" | 26.59       | 78.42       | Kunwari river    | 3.46                     |               | Sindh     | Yamuna |
| 417   | Stream 46 |            | 25.05       | 77.61       | 25.05       | 77.62       | Sindh            | 1.33                     |               | Sindh     | Yamuna |
| 418   | Stream 46 |            | 2634'24.75" | 7824'44.96" | 26.59       | 78.41       | Kunwari river    | 3.81                     |               | Sindh     | Yamuna |
| 419   | Stream 47 |            | 25.01       | 77.64       | 25.04       | 77.61       | Sindh            | 8.57                     |               | Sindh     | Yamuna |
| 420   | Stream 48 |            | 25.04       | 77.62       | 25.04       | 77.61       | Sindh            | 0.57                     |               | Sindh     | Yamuna |
| 421   | Stream 49 |            | 24.99       | 77.56       | 25.01       | 77.59       | Sindh            | 3.69                     |               | Sindh     | Yamuna |
| 422   | Stream 5  |            | 24.34       | 77.58       | 24.34       | 77.54       | Burh Nadi        | 7.15                     |               | Sindh     | Yamuna |
| 423   | Stream 5  |            | 2426'7.72"  | 7719'33.20" | 2426'39.39" | 7722'23.80" | Senduwa Nadi     | 9.57                     |               | Sindh     | Yamuna |
| 424   | Stream 5  |            | 24.75       | 77.69       | 24.77       | 77.63       | Asarh Nadi       | 11.7                     |               | Sindh     | Yamuna |
| 425   | Stream 5  |            | 24.83       | 77.63       | 24.88       | 77.67       | Chooch Nadi      | 12.7                     |               | Sindh     | Yamuna |
| 426   | Stream 5  |            | 24.96       | 77.72       | 25.02       | 77.74       | Indar Nadi       | 12.5                     |               | Sindh     | Yamuna |
| 427   | Stream 5  |            | 25.34       | 77.61       | 25.32       | 77.65       | Khirai Nala      | 4.97                     |               | Sindh     | Yamuna |
| 428   | Stream 5  |            | 25.04       | 77.88       | 25.05       | 77.89       | Aerma Nala       | 2.87                     |               | Sindh     | Yamuna |
| 429   | Stream 5  |            | 25.55       | 77.91       | 25.59       | 77.97       | Baruha Nadi      | 11                       |               | Sindh     | Yamuna |
| 430   | Stream 5  |            | 25.56       | 78.05       | 25.56       | 78.04       | Dundai Nadi      | 2                        |               | Sindh     | Yamuna |
| 431   | Stream 5  |            | 2553'56.61" | 78 3'30.15" | 2552'41.97" | 78 8'1.20"  | Sukha Nadi       | 12.5                     |               | Sindh     | Yamuna |
| 432   | Stream 5  |            | 2553'18.37" | 78 4'28.50" | 2551'28.86" | 78 7'32.83" | Sukha Nadi       | 8.21                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longitude   | Latitude    | Longitude   |                  |                          |               |           |        |
| 433   | Stream 5  |            | 2558'6.77"  | 7813'53.01" | 2557'55.85" | 7813'11.97" | Larma Nala       | 1.53                     |               | Sindh     | Yamuna |
| 434   | Stream 5  |            | 26 3'29.47" | 78 8'33.68" | 26 0'0.56"  | 78 9'13.42" | Maingra Nadi     | 11.3                     |               | Sindh     | Yamuna |
| 435   | Stream 5  |            | 26.49       | 78.46       | 26.43       | 78.49       | Basil Nadi       | 10.1                     |               | Sindh     | Yamuna |
| 436   | Stream 5  |            | 2624'50.70" | 79 4'32.30" | 2624'46.08" | 79 5'9.33"  | Sindh            | 1.42                     |               | Sindh     | Yamuna |
| 437   | Stream 5  |            | 2620'46.17" | 79 7'56.46" | 2620'36.52" | 79 8'19.41" | Pahuj River      | 1.92                     |               | Sindh     | Yamuna |
| 438   | Stream 50 |            | 24.98       | 77.57       | 25.00       | 77.59       | Sindh            | 5.25                     |               | Sindh     | Yamuna |
| 439   | Stream 51 |            | 25.00       | 77.60       | 25.00       | 77.59       | Sindh            | 1.76                     |               | Sindh     | Yamuna |
| 440   | Stream 52 |            | 24.99       | 77.60       | 24.99       | 77.60       | Sindh            | 0.41                     |               | Sindh     | Yamuna |
| 441   | Stream 53 |            | 24.97       | 77.62       | 24.98       | 77.61       | Sindh            | 1.27                     |               | Sindh     | Yamuna |
| 442   | Stream 54 |            | 24.97       | 77.65       | 24.97       | 77.61       | Sindh            | 8.23                     |               | Sindh     | Yamuna |
| 443   | Stream 55 |            | 24.95       | 77.57       | 24.97       | 77.61       | Sindh            | 8.55                     |               | Sindh     | Yamuna |
| 444   | Stream 56 |            | 24.95       | 77.61       | 24.95       | 77.61       | Sindh            | 1.67                     |               | Sindh     | Yamuna |
| 445   | Stream 59 |            | 24.89       | 77.58       | 24.89       | 77.59       | Sindh            | 2.57                     |               | Sindh     | Yamuna |
| 446   | Stream 6  |            | 24.90       | 77.74       | 24.86       | 77.70       | Chooch Nadi      | 9.2                      |               | Sindh     | Yamuna |
| 447   | Stream 6  |            | 24.78       | 77.61       | 24.80       | 77.64       | Asarh Nadi       | 7.45                     |               | Sindh     | Yamuna |
| 448   | Stream 6  |            | 24.98       | 77.92       | 25.02       | 77.89       | Aerma Nala       | 7                        |               | Sindh     | Yamuna |
| 449   | Stream 6  |            | 25.53       | 77.96       | 25.55       | 77.96       | Baruha Nadi      | 8.33                     |               | Sindh     | Yamuna |
| 450   | Stream 6  |            | 2550'33.23" | 78 8'59.33" | 2551'6.25"  | 78 9'22.83" | Sukha Nadi       | 1.81                     |               | Sindh     | Yamuna |
| 451   | Stream 6  |            | 26 1'16.68" | 78 7'32.71" | 26 0'44.64" | 78 7'58.70" | Maingra Nadi     | 2.17                     |               | Sindh     | Yamuna |
| 452   | Stream 6  |            | 2552'34.49" | 7812'27.53" | 2551'4.54"  | 7813'15.68" | Sukha Nadi       | 4.45                     |               | Sindh     | Yamuna |
| 453   | Stream 6  |            | 26.39       | 78.45       | 26.39       | 78.58       | Basil Nadi       | 28.7                     |               | Sindh     | Yamuna |
| 454   | Stream 6  |            | 2624'20.56" | 79 4'23.41" | 79 5'8.42"E | 79 5'8.42"  | Sindh            | 1.66                     |               | Sindh     | Yamuna |
| 455   | Stream 6  |            | 2620'18.03" | 79 5'27.19" | 2619'53.13" | 79 7'21.77" | Pahuj River      | 5.72                     |               | Sindh     | Yamuna |
| 456   | Stream 63 |            | 24.80       | 77.58       | 24.78       | 77.54       | Sindh            | 6.27                     |               | Sindh     | Yamuna |
| 457   | Stream 64 |            | 24.76       | 77.60       | 24.76       | 77.55       | Sindh            | 7.87                     |               | Sindh     | Yamuna |
| 458   | Stream 65 |            | 24.79       | 77.59       | 24.77       | 77.55       | Sindh            | 8.26                     |               | Sindh     | Yamuna |
| 459   | Stream 66 |            | 24.73       | 77.57       | 24.74       | 77.56       | Sindh            | 2.55                     |               | Sindh     | Yamuna |
| 460   | Stream 67 |            | 24.72       | 77.59       | 24.73       | 77.56       | Sindh            | 4.59                     |               | Sindh     | Yamuna |

| S. No | River     | River Code | Origin      |             | Destination |             | Con-fluence with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|-----------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |           |            | Latitude    | Longitude   | Latitude    | Longitude   |                  |                          |               |           |        |
| 461   | Stream 68 |            | 24.69       | 77.59       | 24.71       | 77.54       | Sindh            | 7.27                     |               | Sindh     | Yamuna |
| 462   | Stream 69 |            | 24.73       | 77.51       | 24.71       | 77.54       | Sindh            | 8.48                     |               | Sindh     | Yamuna |
| 463   | Stream 7  |            | 24.61       | 77.69       | 24.64       | 77.72       | Chooch Nadi      | 7                        |               | Sindh     | Yamuna |
| 464   | Stream 7  |            | 24.77       | 77.61       | 24.77       | 77.63       | Asarh Nadi       | 2.35                     |               | Sindh     | Yamuna |
| 465   | Stream 7  |            | 25.00       | 77.86       | 25.00       | 77.88       | Aerma Nala       | 2.63                     |               | Sindh     | Yamuna |
| 466   | Stream 7  |            | 25.48       | 77.95       | 25.53       | 77.99       | Baruha Nadi      | 9.34                     |               | Sindh     | Yamuna |
| 467   | Stream 7  |            | 2550'4.35"  | 7813'5.30"  | 2549'55.26" | 7814'36.78" | Sukha Nadi       | 3.13                     |               | Sindh     | Yamuna |
| 468   | Stream 7  |            | 26.44       | 78.59       | 26.41       | 78.66       | Basil Nadi       | 12.9                     |               | Sindh     | Yamuna |
| 469   | Stream 7  |            | 2623'57.77" | 79 2'25.74" | 2622'54.17" | 79 2'13.97" | Sindh            | 3.29                     |               | Sindh     | Yamuna |
| 470   | Stream 7  |            | 2617'1.50"  | 79 7'2.16"  | 2618'39.04" | 79 7'26.16" | Pahuj River      | 4.56                     |               | Sindh     | Yamuna |
| 471   | Stream 70 |            | 24.68       | 77.59       | 24.70       | 77.54       | Sindh            | 8.84                     |               | Sindh     | Yamuna |
| 472   | Stream 71 |            | 24.66       | 77.60       | 24.69       | 77.54       | Sindh            | 9.67                     |               | Sindh     | Yamuna |
| 473   | Stream 72 |            | 24.66       | 77.53       | 24.69       | 77.53       | Sindh            | 5.29                     |               | Sindh     | Yamuna |
| 474   | Stream 73 |            | 24.69       | 77.51       | 24.68       | 77.51       | Sindh            | 2.76                     |               | Sindh     | Yamuna |
| 475   | Stream 74 |            | 24.65       | 77.46       | 24.65       | 77.49       | Sindh            | 4.1                      |               | Sindh     | Yamuna |
| 476   | Stream 75 |            | 24.57       | 77.44       | 24.59       | 77.48       | Sindh            | 8.38                     |               | Sindh     | Yamuna |
| 477   | Stream 76 |            | 24.50       | 77.48       | 24.50       | 77.49       | Sindh            | 1.12                     |               | Sindh     | Yamuna |
| 478   | Stream 77 |            | 24.49       | 77.47       | 24.50       | 77.49       | Sindh            | 5                        |               | Sindh     | Yamuna |
| 479   | Stream 78 |            | 24.45       | 77.46       | 24.48       | 77.49       | Sindh            | 7                        |               | Sindh     | Yamuna |
| 480   | Stream 79 |            | 24.45       | 77.47       | 24.47       | 77.50       | Sindh            | 6.61                     |               | Sindh     | Yamuna |
| 481   | Stream 7a |            | 2622'18.85" | 79 0'49.00" | 2623'9.28"  | 79 0'38.72" | Sindh            | 3.66                     |               | Sindh     | Yamuna |
| 482   | Stream 8  |            | 24.63       | 77.67       | 24.67       | 77.72       | Chooch Nadi      | 12                       |               | Sindh     | Yamuna |
| 483   | Stream 8  |            | 24.72       | 77.67       | 24.75       | 77.63       | Asarh Nadi       | 10.3                     |               | Sindh     | Yamuna |
| 484   | Stream 8  |            | 25.09       | 77.93       | 25.09       | 77.88       | Aerma Nala       | 8.94                     |               | Sindh     | Yamuna |
| 485   | Stream 8  |            | 25.44       | 77.96       | 25.48       | 77.99       | Baruha Nadi      | 6.83                     |               | Sindh     | Yamuna |
| 486   | Stream 8  |            | 2550'15.69" | 7816'21.86" | 2549'57.02" | 7817'19.27" | Sukha Nadi       | 2.45                     |               | Sindh     | Yamuna |
| 487   | Stream 8  |            | 26.45       | 78.61       | 26.43       | 78.68       | Basil Nadi       | 12.5                     |               | Sindh     | Yamuna |
| 488   | Stream 8  |            | 2626'40.13" | 79 0'13.16" | 2623'52.50" | 7859'37.80" | Sindh            | 7.88                     |               | Sindh     | Yamuna |

| S. No | River      | River Code | Origin      |             | Destination |             | Con-fluecne with | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------|------------|-------------|-------------|-------------|-------------|------------------|--------------------------|---------------|-----------|--------|
|       |            |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                  |                          |               |           |        |
| 489   | Stream 8   |            | 2617'56.73" | 79 3'41.45" | 2617'25.17" | 79 5'29.00" | Pahuj River      | 5.15                     |               | Sindh     | Yamuna |
| 490   | Stream 80  |            | 24.41       | 77.59       | 24.43       | 77.51       | Sindh            | 20.7                     |               | Sindh     | Yamuna |
| 491   | Stream 81  |            | 24.41       | 77.44       | 24.42       | 77.50       | Sindh            | 11.5                     |               | Sindh     | Yamuna |
| 492   | Stream 81a |            | 24.38       | 77.42       | 24.38       | 77.50       | Sindh            | 16                       |               | Sindh     | Yamuna |
| 493   | Stream 82  |            | 24.27       | 77.35       | 24.37       | 77.50       | Sindh            | 35.9                     |               | Sindh     | Yamuna |
| 494   | Stream 83  |            | 24.32       | 77.48       | 24.32       | 77.50       | Sindh            | 4.47                     |               | Sindh     | Yamuna |
| 495   | Stream 84  |            | 24.26       | 77.49       | 24.27       | 77.49       | Sindh            | 1.81                     |               | Sindh     | Yamuna |
| 496   | Stream 84a |            | 24.22       | 77.36       | 24.28       | 77.49       | Sindh            | 28.3                     |               | Sindh     | Yamuna |
| 497   | Stream 84b |            | 24.26       | 77.53       | 24.27       | 77.50       | Sindh            | 7.62                     |               | Sindh     | Yamuna |
| 498   | Stream 85  |            | 24.16       | 77.38       | 24.23       | 77.50       | Sindh            | 25.3                     |               | Sindh     | Yamuna |
| 499   | Stream 86  |            | 24.23       | 77.53       | 24.22       | 77.51       | Sindh            | 5.25                     |               | Sindh     | Yamuna |
| 500   | Stream 87  |            | 24.14       | 77.55       | 24.21       | 77.50       | Sindh            | 15.7                     |               | Sindh     | Yamuna |
| 501   | Stream 88  |            | 24.15       | 77.42       | 24.14       | 77.46       | Sindh            | 6.95                     |               | Sindh     | Yamuna |
| 502   | Stream 89  |            | 24.07       | 77.47       | 24.13       | 77.46       | Sindh            | 11.2                     |               | Sindh     | Yamuna |
| 503   | Stream 9   |            | 24.74       | 77.74       | 24.75       | 77.76       | Chooch Nadi      | 4.92                     |               | Sindh     | Yamuna |
| 504   | Stream 9   |            | 24.70       | 77.64       | 24.72       | 77.62       | Asarh Nadi       | 6.5                      |               | Sindh     | Yamuna |
| 505   | Stream 9   |            | 2549'22.86" | 7817'40.03" | 2549'47.50" | 7818'18.92" | Sukha Nadi       | 1.88                     |               | Sindh     | Yamuna |
| 506   | Stream 9   |            | 26.45       | 78.67       | 26.43       | 78.68       | Basil Nadi       | 3.32                     |               | Sindh     | Yamuna |
| 507   | Stream 9   |            | 2627'26.39" | 7856'54.56" | 2626'4.29"  | 7856'56.35" | Sindh            | 4.46                     |               | Sindh     | Yamuna |
| 508   | Stream 9   |            | 2615'27.85" | 79 3'39.03" | 2615'51.07" | 79 4'58.32" | Pahuj River      | 4.81                     |               | Sindh     | Yamuna |
| 509   | Stream 90  |            | 24.24       | 77.55       | 24.23       | 77.50       | Sindh            | 9.54                     |               | Sindh     | Yamuna |
| 510   | Stream 91  |            | 24.29       | 77.53       | 24.29       | 77.49       | Sindh            | 8.43                     |               | Sindh     | Yamuna |
| 511   | Stream 92  |            | 24.30       | 77.53       | 24.31       | 77.50       | Sindh            | 4.25                     |               | Sindh     | Yamuna |
| 512   | Stream 93  |            | 24.49       | 77.52       | 24.50       | 77.49       | Sindh            | 7                        |               | Sindh     | Yamuna |
| 513   | Stream 94  |            | 24.50       | 77.55       | 24.52       | 77.49       | Sindh            | 12.5                     |               | Sindh     | Yamuna |
| 514   | Stream 95  |            | 24.54       | 77.52       | 24.54       | 77.49       | Sindh            | 4.6                      |               | Sindh     | Yamuna |
| 515   | Stream 96  |            | 24.54       | 77.53       | 24.56       | 77.49       | Sindh            | 6.75                     |               | Sindh     | Yamuna |
| 516   | Stream 97  |            | 24.74       | 77.53       | 24.75       | 77.55       | Sindh            | 5.33                     |               | Sindh     | Yamuna |
| 517   | Stream 98  |            | 24.74       | 77.50       | 24.77       | 77.54       | Sindh            | 9.48                     |               | Sindh     | Yamuna |
| 518   | Stream 99  |            | 24.93       | 77.57       | 24.95       | 77.61       | Sindh            | 7.45                     |               | Sindh     | Yamuna |
| 519   | Stream1    |            | 2543'15.04" | 7839'16.45" | 2546'32.60" | 7839'58.58" | Kharaura Nala    | 9.13                     |               | Sindh     | Yamuna |

| S. No | River            | River Code | Origin      |             | Destination |             | Con-fluecne with        | Length of the river (km) | Sub-Sub Basin | Sub-Basin | Basin  |
|-------|------------------|------------|-------------|-------------|-------------|-------------|-------------------------|--------------------------|---------------|-----------|--------|
|       |                  |            | Latitude    | Longi-tude  | Latitude    | Longi-tude  |                         |                          |               |           |        |
| 520   | Stream3          |            | 2555'46.74" | 78 0'16.80" | 2556'21.64" | 78 4'43.97" | Sukha Nadi              | 11                       |               | Sindh     | Yamuna |
| 521   | Stream3          |            | 2555'32.26" | 7810'48.51" | 2554'44.49" | 7811'11.97" | Larma Nala              | 2.28                     |               | Sindh     | Yamuna |
| 522   | Strteam 30       |            | 2543'5.35"  | 78 4'20.54" | 2543'4.07"  | 78 9'38.39" | Sindh                   | 16.1                     |               | Sindh     | Yamuna |
| 523   | Sukdeni Nala     |            | 25.57       | 78.06       | 25.64       | 78.07       | Sindh                   | 11.7                     |               | Sindh     | Yamuna |
| 524   | Sukh Nadi        |            | 26.27       | 78.21       | 26.34       | 78.31       | Morar Nadi              | 23.5                     |               | Sindh     | Yamuna |
| 525   | Sukha Jharo Nala |            | 24.95       | 77.65       | 24.95       | 77.61       | Sindh                   | 7.64                     |               | Sindh     | Yamuna |
| 526   | Sukha Nadi       |            | 2553'11.17" | 7758'0.08"  | 2551'16.70" | 78 9'48.29" | Non Nadi                | 35.7                     |               | Sindh     | Yamuna |
| 527   | Sukha Nala       |            | 2551'21.95" | 7756'8.98"  | 2550'32.84" | 78 0'52.79" | Sukha Nadi              | 11.7                     |               | Sindh     | Yamuna |
| 528   | Sukha Nala       |            | 26.09       | 78.30       | 26.01       | 78.34       | Ch-hachhundar Nadi      | 13.9                     |               | Sindh     | Yamuna |
| 529   | Sukhdini Nadi    |            | 2615'44.76" | 7745'51.18" | 26.32       | 77.73       | Sauh (Saun Nadi)        | 13.4                     |               | Sindh     | Yamuna |
| 530   | Sunao Nala       |            | 26.25       | 78.58       | 26.33       | 78.73       | Saon Nadi               | 30                       |               | Sindh     | Yamuna |
| 531   | Tedu Nala        |            | 2541'34.16" | 7828'37.80" | 2547'11.51" | 7830'18.84" | Parron Nala             | 17.3                     |               | Sindh     | Yamuna |
| 532   | Tumdhar Nala     |            | 25.60       | 78.37       | 25.62       | 78.27       | Kasna Nala              | 17.2                     |               | Sindh     | Yamuna |
| 533   | Umarwaro Nala    |            | 24.91       | 77.58       | 24.90       | 77.59       | Sindh                   | 3.36                     |               | Sindh     | Yamuna |
| 534   | Visayawar Nala   |            | 2537'38.26" | 7819'36.72" | 2539'7.54"  | 7819'6.21"  | Sonya Nala (Somia Nala) | 4                        |               | Sindh     |        |

