Water Allocation in Helmand River Basin

Kawa Sahab
Technical Unit of Trans-Boundary Water
Ministry of Energy and Water
Content

• Kabul
• Harriod-Murghab
• Amu
• Helmand
• History of Helmand Treaty
• Water allocation in Helmand Treaty
• Conclusion
• Recommendation
Kabul River Basin

- Countries: Afghanistan and Pakistan
- Total Area Of River Basin in Afghanistan: 108,441 km²
- The total water capacity: 19.25 bcm
- Settled Population: 11.3 Million
- Watershed: 7
Harirod-Murghab River Basin

- **Countries:**
  - Afghanistan, Iran and Turkmenistan
- **Total Area Of River Basin in Afghanistan**
  - 77,604 km²
- **The total water capacity**
  - 1.48 bmc
- **Settled Population**
  - 6.8 Million
- **Watershed:**
  - 4
Amu River Basin

- Countries: Afghanistan, Tajikistan, Uzbekistan and Turkmenistan
- Total Area Of River Basin in Afghanistan: 90,693 km²
- The total water capacity: 24.1 bcm
- Settled Population: 4.7 Million
- Watershed: 5
Helmand River Basin

- Countries: Afghanistan, Iran and Pakistan
- Total Area Of River Basin in Afghanistan: 262,342 km²
- The total water capacity: 12.17 bmc
- Settled Population: 7.6 Million
- Watershed: 19
History of Helmand Treaty

• Gold Smith 1872 and MacMahon 1905
  • To solve the disputed between Afghanistan and Iran

• MacMahon Arbitrary  10. Apr. 1905
  • To solve the problem of land and water of Saistan between Afghanistan and Iran

• The neutral commission trip to Helmand River Report
  • The water allocation at the Delta of Helmand River between Afghanistan and Iran
Water Year in Helmand-River Treaty

• A “Normal water year” means the year during which the total flow of water from the first of October to the end of the succeeding September.

• Measure and calculated at the hydrometric station at Dehrawud located on the Helmand River upstream from entrance to Kajaki Reservoir is four million five hundred and ninety thousand.
The total amount of water from the Helmand River to be delivered by Afghanistan to Iran in a normal water year, is limited to an average flow of twenty two cubic meters per second (22m³/sec).

An additional amount, which is being granted by Afghanistan to Iran as an expression of goodwill and brotherly relations, of an average flow of four cubic meters per second (4m³/sec).
## Water Allocation per Month

<table>
<thead>
<tr>
<th>Monthly</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct</td>
<td>4.23</td>
<td>0.77</td>
<td>5.00</td>
</tr>
<tr>
<td>Nov</td>
<td>10.75</td>
<td>1.97</td>
<td>12.72</td>
</tr>
<tr>
<td>Dec</td>
<td>19.48</td>
<td>3.56</td>
<td>23.04</td>
</tr>
<tr>
<td>Jan</td>
<td>29.35</td>
<td>5.32</td>
<td>34.67</td>
</tr>
<tr>
<td>Feb</td>
<td>66.12</td>
<td>12.04</td>
<td>78.16</td>
</tr>
<tr>
<td>March</td>
<td>61.90</td>
<td>11.23</td>
<td>73.13</td>
</tr>
<tr>
<td>April</td>
<td>26.30</td>
<td>4.81</td>
<td>31.11</td>
</tr>
<tr>
<td>May</td>
<td>7.64</td>
<td>1.39</td>
<td>9.03</td>
</tr>
<tr>
<td>June</td>
<td>16.71</td>
<td>3.02</td>
<td>19.73</td>
</tr>
<tr>
<td>July</td>
<td>11.61</td>
<td>2.11</td>
<td>13.72</td>
</tr>
<tr>
<td>August</td>
<td>7.93</td>
<td>1.44</td>
<td>9.37</td>
</tr>
<tr>
<td>Sept</td>
<td>1.98</td>
<td>0.34</td>
<td>2.32</td>
</tr>
</tbody>
</table>
Water Delivery Place

• At the place where the boundary line crosses the Rude Seistan

• At two other places where the boundary line is located in the bed of Helmand River between boundary pillars number fifty one and fifty two.
The Afghanistan Authority and Responsibility in Helman Basin

- Afghanistan agrees that it shall take no action to deprive Iran totally or partially of its water right to the water of the Helmand River as fixed and delimited by the previsions of Articles II, III and IV of this Treaty.
- Afghanistan shall retain all rights to the balance of the water of the Helmand River and may make such use or disposition of the water as it chooses.
- Iran, shall make no claim to the water of the Helmand River in excess of the amounts of specified in this Treaty, even if additional amounts of water may be available in the Helmand Lower Delta and may be put to a beneficial use by Iran.
Recommendation

• The border point (pillar) should be determined
• The borders’ stations should be rehabilitated
• Installation of division gates at the Delivery points in Helmand River
Thanks for your Kind Attention!