**Proposal for selection of districts for GIS mapping under**

**Bangladesh Pharmacy Model Initiative (BPMI)**

There are 64 districts in Bangladesh. After a long discussion it has been decided to perform GIS mapping of pharmacies in 7(seven) districts. The points of consideration were availability of time, financial resources and the representativeness of the sample in Bangladesh context. The districts are neither equal in geographical size or in population nor in the accessibility or in socio-economic indicators. Political prioritization is also an important issue.

Considering the complexity of selecting the districts we tried to analyze the published socio-economic data from GOB sources of 64 districts on the following four indicators,

1. IMR (Infant Mortality Rate),

2. % of population in the upper poverty line,

3. Literacy Rate and

4. Average number of population taking services from one pharmacy.

In the districts where IMR rate is higher and where more people lying below the poverty line, literacy rate is low and more people receiving services from one pharmacy probably demand more attention in the availability of health services. We identified the districts and categorized them in three subsets.

**First sub-set means:** high IMR+ more people below the poverty line+ low literacy rate+ more people receiving pharmacy service from on pharmacy

**Second sub-set indicates:** Low IMR+ less people below the poverty line+ high literacy rate+ less people receiving pharmacy service from one pharmacy

**Middle (Third) Sub-set** of districts is lying in between highest and lowest range.

Initially 5(Five) districts have been selected from each subset to consider the other feasibility factors.

**Following is the result of the preliminary selection (Previous):**

|  |  |  |
| --- | --- | --- |
| **Districts from first subset** | **Districts from 2nd subset** | **Districts from middle subset** |
| Kurigram(9), Shariatpur(6)Bhola(7), Sunamgonj(11)Jamalpur(7), | Gopalgonj(5), Khulna Sadar(14), Kustia(6), Gazipur(5), Dhaka(46 thana) | Natore(6), Sylhet(12), Jessore(8), Moulvibazar(6), Norshingdi(6) |

Upon touch-base meeting decision on 16-12-2015, 6 (Six) districts have been selected from each subset so that there is presence of at least one district in each division.

**Following is the result of the preliminary selection (Previous):**

|  |  |  |
| --- | --- | --- |
| **Districts from first subset** | **Districts from 2nd subset** | **Districts from middle subset** |
| **Kurigram(9),** Shariatpur(6)Bhola(7), **Sunamgonj(11)**Jamalpur(7), Gaibandha(7) | **Gopalgonj(5),** Khulna Sadar(14), Kustia(6), Gazipur(5), Dhaka(46 thana), **Jhalokathi(4)** | **Natore(6),** Sylhet(12), **Jessore(8),** Moulvibazar(6), Norshingdi(6), **Chandpur(8)** |

Some other factors also need to be considered before starting the mapping exercise. On an average there are 7(seven) upazilas (sub-district) in a district. Among the preliminary selected districts we may select those districts where sub-districts are nearer to average. Beside this, we are planning to use Electronic Tablets for data collection, so 3G network coverage is an important consideration. We are also thinking involvement of BCDS offices and members in mapping exercise. Considering all above factors, we have selected two districts from each; first and second subset and three districts from the third (middle) subset as the number of districts are more in third (middle) subset.

The selected 7(seven) districts will be better representative for mapping exercise. We can also propose all fifteen districts before DGDA and other stakeholders to choose 7(seven) districts from them.

[As Gopalgong and shariatpur are in the same geographical location, we can take any one of them. Gopalgonj will be politically preferred. Bhola is a remote district. Beside shariatpur and Bhola, Sunamgonj comes before Jamalpur in terms of rating. Khulna and Dhaka have too many sub-districts. Kustia is the best in all indicators, so non-representative. Norshingdhi is near Dhaka (we have taken Gazipur) and Sylhet has too many sub-districts.]

**Following are the result of the previous exercise:**

|  |  |  |
| --- | --- | --- |
| Districts from first subset | Districts from 2nd subset | Districts from middle subset |
| Kurigram(9), Sunamgonj(11)  | Gopalgonj(5), Gazipur(5),  | Natore(6), Jessore(8), Moulvibazar(6)  |

As it was decided in the touch-base meeting on 16-12-2015 that the selected district should be at least one from each division, so we considered Jhalokathi from Barisal division in 2nd subset instead of Gazipur (as we have selected Gopalgonj for Dhaka Division) and in middle subset we have considered Chandpur from Chittagong division (as Sunamgonj has already been selected from Sylhet division) instead of Moulvibazar.

**Following are the result of the final exercise:**

|  |  |  |
| --- | --- | --- |
| Districts from first subset | Districts from 2nd subset | Districts from middle subset |
| Kurigram(9), Sunamgonj(11)  | Gopalgonj(5), Jhalokathi(4),  | Natore(6), Jessore(8), Chandpur(8)  |

For a clear view we can see the country map with the district highlighted.