

**NVBDCP report of the KOREA district by RD, Raipur**  
**(Follow up after World bank visit)**  
**(Date 16<sup>th</sup> to 20 June 2012)**

**About district:** Korea is one of the North-West District of Chhattisgarh State. The District has derived its Name from the Korea State, the former princely State Korea. According to the 2011 census Koriya district has a population of 659,039. This gives it a ranking of 510th in India (out of a total of 640). The district has a population density of 100 inhabitants per square kilometre (260 /sq mi) .Its population growth rate over the decade 2001-2011 was 12.4 %. Korea has a sex ratio of 971 females for every 1000 males,<sup>[3]</sup> and a literacy rate of 71.41 %. According to the 2001 census, the total population of the district was 586,327 Literacy rate was 63.1%, the male literacy rate being 75.7% and female literacy being 49.7%.

**Epidemiological parameters of the Korea from 2006 to 2011.**

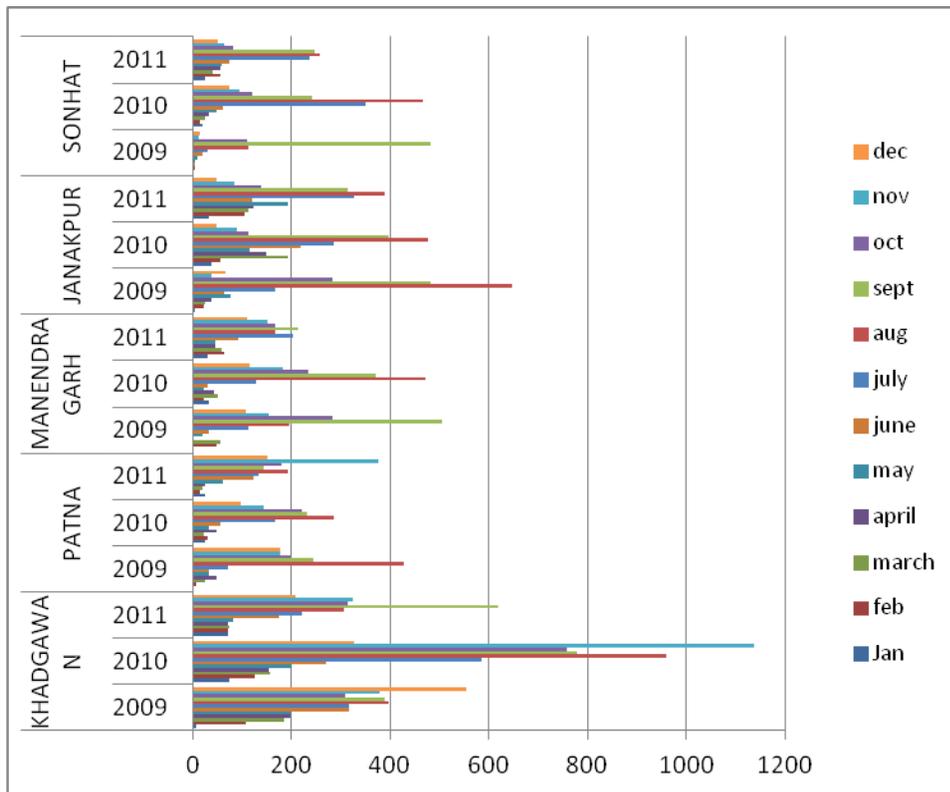
YEAR	POPLN	BSC	BSE	TPC	PF	PF%	ABER	API	SPR	Nil
2006	656836	102870	102870	8438	5390	63.88	15.66	12.85	8.20	Nil
2007	657754	94725	94725	7051	4615	65.45	14.40	10.72	7.44	Nil
2008	657651	84753	84753	9140	4721	51.65	12.89	13.90	10.78	Nil
2009	662023	87936	87936	9041	5400	59.73	13.28	13.66	10.28	Nil
2010	670049	135529	135529	12327	8009	64.97	20.23	18.40	9.10	5
2011	670049	92979	92979	8588	6783	78.98	13.9	12.82	9.24	2

API reduced from 18.40 in year 2010 to 12.82 in year 2011. There is up and down in the number of cases from 2006 to 2011. The Pf % is about 78 in year 2011. Deaths were noted in year 2010 and 2011 while nil reported deaths from 2006 to 2009 despite of the large number of cases.

**Visited Health facilities:** Team has visited the district during 16<sup>th</sup> to 20<sup>th</sup> June 2012 and selected sampled health institute and sentinel site.

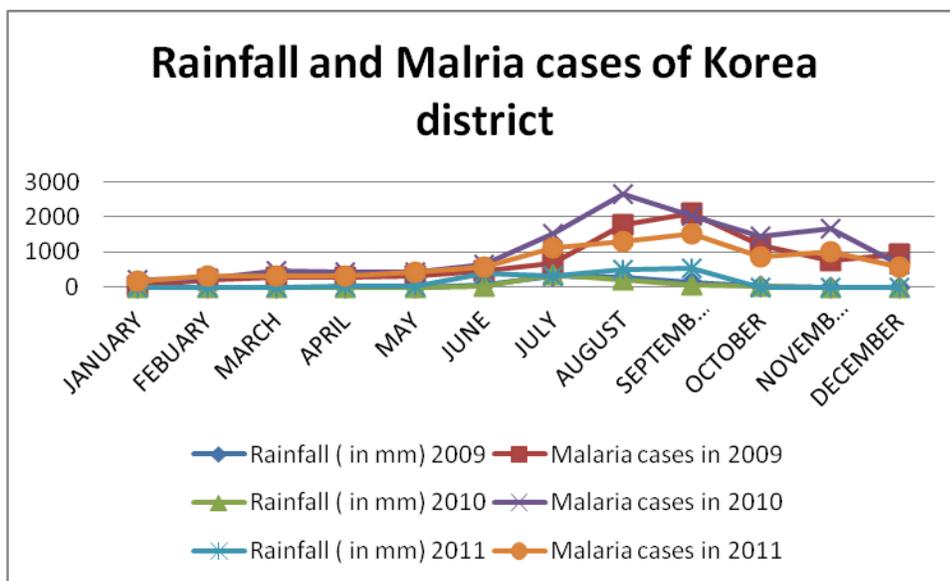
District	17/7/2012	18/7/2012	19/7/2012	20/07/2012
BLOCK CHC	Sonhat	Manendragarh	Khadgawan	<b>Feedback with CMO and DMO at district level</b>
PHCs	Katghodi	Nagpur	Pondibachhara	
HSC	Nawgoi	Ujijarpur	Jilda	
Villages ASHA	3	3	2	

### Seasonal pattern of malaria since last 3 years



Pick of the cases seen in the Monsoon and early winter season in all blocks of the district.

### Metrological aspects of malaria



As Rainfall increases the total malaria cases also increases but the above graph showing the extension transmission in early winter that might be due to anopheles fluvitis in the winter season.

**Comparative statement between World Bank visit (November 2011) and present RD visit (July 2012)**

**Follow-up after SIX month to see the progress**

Sr No	Report of World Bank Visit (22 and 23 th November 2011)	Korea visit on 16 <sup>th</sup> to 20 <sup>th</sup> July 2012
1	<p><b>Early Case Detection and Prompt Treatment (EDPT):</b> Rapid Diagnostic Tests (R):</p> <ul style="list-style-type: none"> <li>• RDT was available in the district, and data was available about its distribution and stock position.</li> <li>• The quantity of RDT is sufficient to meet technical requirements, but not for deployment at scale. Many of the Mitanin did not have stock of RDT, and were using slides.</li> <li>• The quantities supplied need to be enhanced</li> <li>• The distribution of RDT is reported to have been made by the desired criteria (burden of disease and distance from microscopy centre), but this may not apply consistently.</li> </ul>	<ul style="list-style-type: none"> <li>• Presently RDK availability is restricted to only one CHC (Khadgawan) out of 31 but is also insufficient quantity. Pheripheral health institute need replenish stock on regular basis. Lack of kits at surveyed HSC, PHCs and village surveyed.</li> <li>• The presumptive treatment with chloroquine is practiced in the selected field area of the survey.</li> </ul>
2	<p><b>Blood Slides and microscopy:</b></p> <ul style="list-style-type: none"> <li>• While there were islands of excellence, the quality of slides was mostly poor, and needs substantial improvement.</li> <li>• Slide washing in most centre is not adequate for reuse</li> <li>• The microscopes in the field are of inconsistent quality; most of them (possibly all of them) are not covered by regular maintenance contracts or agreements, and there does not exist any predictable mechanism for servicing and repairs in case of poor functioning or breakdowns.</li> <li>• The denatured spirit provided in Mitanin drug kit (for use in drawing blood from finger-prick) is of poor quality – has a very high proportion of water.</li> <li>• There continue to be significant delays in reports reaching the patient/village; there is no mechanism in place for rapidly conveying reports to the field – no serious attempt to use mobile phones even to convey reports in time</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient stock of logistics was available at malaria microscopy centers. There is delay in the field slide collection and examination at center more than 24 hours</li> <li>• RDK were used at emergency cases at CHC level and they also prepare the slide.</li> <li>• There is no slide backlog at Surveyed CHCs but backlog seen at surveyed PHC(one week).</li> <li>• All health institutes are provided with trained lab technician.</li> <li>• There is no system for early conveying of reports to the fields.</li> <li>• M4 formats are not filled properly at health institute.</li> </ul>
3	<p><b>Treatment/drugs:</b></p> <ul style="list-style-type: none"> <li>• ACT is available in stock upto PHC/CHC for all ages.</li> <li>• A few ANM and very few Mitanin/ASHA have been supplied with ACT.</li> <li>• A large proportion of Pf cases detected in the field are</li> </ul>	<ul style="list-style-type: none"> <li>• ACT (adult) stock is available at only one CHC and remaining 2 CHC and 3 PHC running out of stock since 6 to 8 month. Other type of ACT is available at all surveyed health institute.</li> <li>• At HSC and Village only tab chloroquine available with ANM and MPW.</li> </ul>

<p>treated with CQ rather than ACT.</p> <ul style="list-style-type: none"> <li>• All fever cases are getting FRT (including PQ single dose).</li> <li>• CQ is available in adequate amounts; PQ is in low stock in several districts.</li> <li>• Sentinel Site Hospitals (and PHCs) do not consistently follow national drug policy in the treatment of malaria, including severe malaria;</li> <li>• A large number of cases treated as severe malaria do not conform to standard definitions of severe malaria.</li> <li>• Deaths from malaria are common in sentinel sites, but are not being reported</li> </ul>	<ul style="list-style-type: none"> <li>• A large proportion of Pf cases detected in the field are treated with CQ rather than ACT.</li> <li>• All fever cases are getting FRT (including PQ single dose).</li> <li>• Primaquine tablets and injectable are not available at surveyed PHCs.</li> <li>• Sentinel Site Hospitals (and PHCs) do not consistently follow national drug policy in the treatment of malaria, including severe malaria;</li> <li>• A large number of cases treated as severe malaria do not conform to standard definitions of severe malaria.</li> <li>• Deaths from malaria are common in sentinel sites, but are not being reported (separate report will be submitted after proper analysis)</li> </ul>
<p><b><i>Mitanin and HW:</i></b></p> <ul style="list-style-type: none"> <li>• Mitanin characteristics are challenging: <i>para</i> (hamlet)-wise deployment, not all are even literate.</li> <li>• Very few Mitanins have been both, trained and equipped; those trained also do not have regular access to RDT; training for malaria was for one day out of a five-day training for national programs, while a minimum of two days is needed for skill development, followed by repeated re-orientation; training material is of good quality, but much shorter than that prescribed by NVBDCP</li> <li>• ANM/MPW appear to be comfortable using RDT, however the tendency is to use RDT sparingly, only for cases strongly suspected to be malaria</li> <li>• Blood slides being prepared by a few Mitanins and all HW</li> <li>• Insufficient quantities of RDT make it necessary to restrict RDT use to some Mitanins of the 55000 in the state; current criteria (distance from PHC, only one Mitanin per village having RDT, only capable Mitanins given RDT) may not be appropriate –</li> <li>• Incentives not being paid to Mitanin – mode of payment under debate (through VHSC or directly by national programs)</li> <li>• Once incentives are paid, it will be a challenge to manage payment to a few Mitanins and not to others in the same village</li> </ul>	<ul style="list-style-type: none"> <li>• All mitanin were trained in malaria. DMO told that 10% of the mitanin were having RDK supplied by district authority but in the visited subcenter RDK kit were not supplied to Mitanin(ASHA).</li> <li>• Chloroquine tablets and antipyretics are available in Mitanins Kit.</li> <li>• The slides are not prepared by ASHA in the selected surveyed villages by ASHA and she referred the patient to nearest ANM/MPW for slide preparation.</li> <li>• No incentive paid by health authority to mitanin engaged in malaria work.</li> <li>• The presumptive treatment to fever cases is given by ANM/MPW and refers the serious patient to block for further management.</li> </ul>

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	<ul style="list-style-type: none"> <li>• <b>IEC/BCC:</b> <ul style="list-style-type: none"> <li>• No significant visible activities in PHCs visited; Kanker reported to have made good progress, and was held up as an example to be followed.</li> <li>• Necessary to have a good campaign preceding LLIN distribution</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• No significant visible IEC activities at PHC and HSC. Wall painting in term of slogan is visible in some villages.</li> </ul>