

ANNEX 3

CONSULTANT WORK STATUS REPORT

(Electronic version to be sent)

Name of Consultant:	Dr MG Karmarkar
GAIN Manager:	Dr R Sankar
Consultancy contract dated:	13 May, 2009
Period or month of reporting:	October, 2010
Purpose of contract (in brief):	Technical Services for Quality control in laboratories of Salt Commissioner, Government of India with a view to improve production level monitoring
Invoice attached to this report:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. SERVICES COMPLETED

1.1 Sub heading 2

- Situation analysis of existing facilities and functioning of the laboratories. Detailed inventory was prepared, gaps identified and corrective action suggested.

1.1.1 Sub heading 3

- A 3 day hands on training workshop on “Quality Assurance for the iodine content of salt in the laboratories of Salt Department, India” held at Gandhidham, Gujarat from 28th August to 30th August, 2009. Brief report of the workshop attached as **Appendix 1**.

1.1.2 Sub heading 4

- An inventory of chemicals, reagents and equipments at laboratories under Salt Commissioners made. Existing gap were identified and appropriate suppliers/vendors selected. The laboratories under the Salt Department were equipped with necessary (only gap supply) chemicals, reagents and equipments. List of equipment procured, supplied and installed at Salt Commissioner’s as part of gap supply are attached as **Appendix 2**.

- Salt Commissioner has accepted the recommendation of ICCIDD to centralise the procurement of reagents, chemicals for laboratories to Regional Office Level. Procurement and supply of all laboratory equipments and reagents to be standardised across all laboratories.

1.1.3 Sub heading 5

- Identifying 5 nodal laboratories amongst the existing laboratories under the Salt Department.
- Linking up these with ICCIDD IRLI laboratory to identified nodal laboratories and nodal laboratories to participating laboratories to establish a quality assurance protocol.
- As per a order from Salt Commissioner s Office dated 10th November, 2009 (**copy attached as Appendix 3**), Reference Laboratory has been relocated to Jaipur Laboratory, SC from the ICCIDD laboratory. The current outlay of Participating, Nodal and Reference attached as **Appendix 4**.
- Reporting templates for internal quality and external quality assurance were developed. Attached as **Appendix 5**.

1.1.4 Sub heading 6

- Visits to 5 nodal laboratories by the Consultant from ICCIDD Reference laboratory made. Refresher training on Quality assurance was provided once again during these visits. On site inspection of the QA/QC protocols being followed at these laboratories were reviewed and corrective measures suggested.

1.1.5 Sub heading 7

- Reporting for QA between participating, nodal and reference laboratory started from the month of December, 2009
- Monthly reports from December, 2009 to August, 2010 have been received and submitted to GAIN. Monthly report of month of August, 2010 attached as **Appendix 6**.
- Feedback for corrective action based on the received report conveyed to the Salt Commissioner Office. Corrective action as per the feedback under taken by the Salt Commissioners Office. Copies of the letters attached as **Appendix 7(1), 7(2)b, 7(3)**.

2. NUMBER OF DAYS SPENT ON EACH SERVICES

Contract Period	15 th May 2009 – 14 th October, 2010				
Total Days					
Rate	US\$				
Total Contractual Value	US\$				
	[Date]	"[No of Days]"	[Rate]	Displ	"[Days Balance]"
14.10.2010			USD 6420		
14.10.2010			USD 5520		

3. PROGRESS MADE ON SERVICES STILL TO BE DELIVERED (if applicable)

3.1 Sub heading 2

- The SC office to share the reports of QA/QC from the month of August to September, October 2010.

4. OUTCOME OR RESULTS (if applicable)

4.1 Sub heading 2

- All Laboratories under the Salt Department equipped with standardized chemicals, reagents and other supplies as necessary (only gap supply). Process to standardise all the procurement at the laboratories initiated.

4.1.1 Sub heading 3

- Training workshop on "Quality Assurance for the iodine content of salt in the laboratories of Salt Department, India" held for chemists of all laboratories of Salt Commissioner Department.
- Workshop attended by Salt commissioner and all Deputy and Assistant Salt Commissioners.

4.1.2 Sub heading 3

- Nodal laboratory visits provided opportunity to review the IQA/EQA procedure being followed at the concerned laboratories. The laboratory staffs were also once again given detailed instruction on IQA/EQA program.

4.1.3 Sub heading 4

- Internal and external quality assurance program established at all the laboratories under the Salt Commissioner. The training, hardware (equipments) and software (monthly reports) have been put in place and the process of quality assurance of laboratory test initiated.
- Nodal laboratory and participating laboratories have started the procedure of IQA from month of November, 2009. The IQA and EQA monthly reports are being received regularly from the month of February, 2010 to till date.
- **This is the first time that an external agency has been allowed access to records of Salt Commissioners laboratory and significant progress achieved in terms of confidence building amongst the stakeholders involved.**
- Nearly 80,000 salt samples are analysed in the Salt Commissioner Laboratories corresponding to 54 Million MT of iodised salt produced in India. The QA/QC program at Salt Commissioners Laboratories ensures that valid and reliable conclusions can be drawn from the iodine content result of these 80,000 salt samples. These results can in turn be used for ensuring adequately iodised salt production in India. Summary Report of total salt samples analysed in year 2009-2010 in Salt Commissioners Laboratory is attached as **Appendix 8**.

5. MEETINGS HELD OR ATTENDED AND RESULTS OF SUCH MEETINGS

5.1 Sub heading 2

- A review meeting to discuss the progress of the project activities was held on 14th January, 2010. The meeting was attended by GAIN and ICCIDD representatives. Dr Rajan Shankar and Dr Arjit Chakrabarty from GAIN and Prof MG Karmarkar, Prof Chandrakant S Pandav and Dr Kapil Yadav from ICCIDD were present during the meeting. Dr Kapil Yadav made a brief presentation outlining the progress made during the project so far.

5.2 Sub heading 3

- A review meeting to discuss the project activities was held at ICCIDD office at All India Institute of Medical Sciences, New Delhi on 23rd October, 2010. The meeting was attended by Salt Commissioner and all the Deputy Salt Commissioners. After reviewing the overall progress of the project, Salt Commissioner requested for a more detailed two day review workshop for Senior management and the focal points of QA/QC from all Regional Offices and Laboratories of the Salt Commissioners Office. Salt Commissioner even offered to bear the expenses of the proposed workshop. Salt Commissioner expressed his appreciation of support of ICCIDD and GAIN in establishing the QA/QC system at Salt Commissioners Laboratories and **requested for extending the project for at least 3 more years.**

5.3 Sub heading 4

- Refresher Course and Review meeting of Quality Assurance for the Laboratories of the Salt Commissioners Office was held at Salt Commissioner Office, Jaipur on 27th and 28th November, 2010. Detailed Agenda of the workshop attached as **Appendix 9**. The meeting was attended by 40 Senior Managerial and Laboratory Personnel from Salt Commissioners Office which included Salt Commissioner and all the Deputy Salt Commissioners. The current QA/QC program was discussed and reviewed in detail, problem areas identified and corrective actions suggested. Power point presented during the workshop by ICCIDD team is attached as **Appendix 10 (1)and Appendix (2)**. Lack of regular feedback to the Participating and Nodal laboratories by the Focal Point was identified as one of the critical area that needs to strengthened further. ICCIDD team suggested that the two supervisors from Salt Commissioners Office can come to ICCIDD Office for 2 to 3 days for a short term training focussing on how to provide feedback to participating and nodal laboratories.
- **Salt Commissioner requested to extend the support for the QA/QC program by ICCIDD for at least next 3 years. Salt Commissioner also suggested that laboratories of Salt Producers should also be made part of the QA/QC program.**

6. NEXT STEPS TO BE UNDERTAKEN / RECOMMENDATIONS

6.1 Sub heading 2

- Extend the support to Salt Commissioners Office for strengthening the QA/QC program for at least 3 years.
- Visit and provide refresher training to nodal laboratory/nodal laboratory personnel regarding QA/QC
- Strengthen the feedback to be given to Participating and Nodal Laboratories based on analysis of QA/QC program.
- Regular visits to be made by the Supervisory personnel to the respective Nodal/Reference laboratory on regular basis to monitor the QA/QC program.
- Review meeting of Senior Managerial and Laboratory Staff of Salt Commissioner's Office to track progress of QA/QC program once every 6 months.
- Involve private iodised salt manufacturers (Branded salt producers and Big Refineries to start with) in QA/QC program established at Salt Commissioner s Laboratories.
- To develop software for web based interactive exchange of reports of QA/QC system. Similarly software for analysing and generating feedback for the QA/QC program can be developed.