Success Story of "Strengthening of Fertilizer Testing Laboratory" under RKVY Madhya Pradesh

- **1. Title:-** Strengthening of Fertilizer Testing Laboratory- A means of fighting against spurious fertilizer.
- **2.** Category:- Agriculture
- 3. Background and Challenges:- Fertilizer is a vital input after seed which influence the productivity of crop and total production. Before the starting of RKVY in the state ,there were four fertilizer testing laboratory were established at divisional HQ Jabalpur, Indore, Bhopal and Gwalior. These labs were established in the state approximately in 1980s and being old, these are in most dilapidated conditions. The equipments and furniture's have almost gone out of use. During the year 2007-08 approximately 25 to 30 Lakh Tons of fertilizer was distributed during Kharif and Rabi season in the state. To regulate the quality of fertilizer and for enforcing the Fertilizer Control Order to ensure the supply of good quality of fertilizers in the state, it is necessary to collect samples time to time and should be analyzed in the lab immediately. But during 2007-08 there were only four fertilizer quality control Labs analyzing approximately 4000 to 6000 samples every year. This quantity of sampling was not enough, as the total quantum of fertilizer use was increasing year after year in the state.

This situation has compelled the state authorities to establish few more labs in the state. Accordingly it has been decided to establish one lab at each divisional HQ, but construction of new buildings, procurement of equipments, furniture and materials requires huge funds. Therefore the attempt has been made to get the funds in the state budget, but after trying for two three years the decision could not be materialized for want of adequate funds. The problem was continuous deterioration of old buildings for which again availability of funds was the biggest bottleneck.

4. Initiatives:- The RKVY was started in the state in the year 2007-08, since fertilizer sector was struggling for funds , therefore in the very first meeting of SLSC of RKVY the project for the strengthening of Four Fertilizer Testing Lab (already Established) was submitted and approved. As it was experienced that new building construction and procurement of equipments and furniture cannot be done simultaneously, therefore to fulfill the decided target of establishing 10 fertilizer testing labs at each divisional HQ , the projects were submitted to SLSC in a phased manner. The total funds sanctioned for Fertilizer Testing Labs are as given below:-

| S.No | Date of SLSC | Cost of the | Expenditure | Output |
|------|--------------|-------------|-------------|---|
| | | project | | |
| 1 | 12.12.2007 | 210.00 | 95.00 | Apparatus, Equipments and machines were purchased for already established lab at Jabalpur, Indore, Gwalior and Bhopal. |
| 2 | 09.07.2009 | 100.00 | 99.82 | Out of this project all 4 existing buildings were renovated. |
| 3 | 12.05.2010 | 100.00 | 99.83 | New lab buildings at Sagar and Ujjain were constructed. |
| 4 | 09.06.2012 | 853.00 | 96.60 | The project was made for new building, glassware, equipments and chemical etc, but new building at Morena divisional HQ could only be made with purchase of glassware for existing labs. |
| 5 | 18.05.2015 | 383.25 | 162.95 | Project was made for 3 new buildings ,furniture, equipments, etc for existing 6 labs, but 3 new lab buildings at Hoshangabad, Rewa and Shahdol along with purchase of furniture could only be materialized. |
| | Total | 1646.25 | 554.20 | |

Though full support was made available for the strengthening of fertilizer testing labs, but construction of buildings and procurement of furniture, equipments etc could not be done in the specified time and as RKVY is a project mode, there is a binding to send the utilization certificate every year for 100% release received from government of India. Therefore the sanctioned projects could not be completed as it was sanctioned.

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5. Key Result/Insight / Interesting Facts:- As per the Fertilizer Act, Fertilizer Control Order and Administrative order issued by the department, Senior Agriculture Development Officer (SADO) and Agriculture Development Officers (ADO) are declared as the Fertilizer Inspectors, and entrusted the main responsibility of collecting samples from each lot of various fertilizers. If one side the department has created the infrastructure facilities for quality control of fertilizer on the other hand the working strength of both the cadre are day by day decreasing by virtue of retirement. There are certain blocks in the state



where no SADOs or ADOs are in position. Therefore directorate has to make the substitute arrangement by deputing SADO/ADOs of other blocks to such block where no SADO / ADOs are posted. Approximately 37.24% post in SADO cadre, 57.94% post in ADO cadre and 68.37% post of lab assistant are lying vacant at present in the state. This is hampering the sample collection process badly. Every year there is campaign organized for the quality control in the state during May - June for kharif and October- January for Rabi seasons. During these period inspections of godowns, dealers, retailers have been done and if any thigh found against the law, appropriate action are being taken against the defaulters. Approximately 4000 to 6000 samples were collected every year for quality control of various fertilizers during 2007-08.

6. Impact:-As described above, four fertilizer testing labs such as Indore, Jabalpur, Gwalior and Bhopal were functioning in the state prior to RKVY. In the first phase new labs namely, Sagar, Ujjain, Morena, Hoshangabad, Rewa and Shahdol has been constructed at each divisional HQ and are equipped with RKVY funds. Out of 06 new labs 4 labs have been notified and started functioning. Despite of all problems like non availability of staff as Inspectors, to 8000 samples are now being about analyzed every year .The fertilizer consumption is also increased from 25 to 30 MT per year during 2007-08 to 80.20MT in the year 2013-14. The impact of strengthening of fertilizer lab can be seen



from the sample testing. The analysis of sample from the year 2007-08 to date is as under:-

| Year | Sample | Sampled | Sample | Non | % of |
|---------|----------|----------|----------|----------|----------|
| | Received | Analyzed | Found | standard | standard |
| | | | Standard | samples | sample |
| 2007-08 | 5478 | 4856 | 3832 | 1024 | 78.91 |
| 2008-09 | 4168 | 4080 | 3575 | 505 | 87.62 |
| 2009-10 | 4043 | 4010 | 3409 | 601 | 85.01 |
| 2010-11 | 4421 | 4387 | 3873 | 514 | 88.28 |
| 2011-12 | 4715 | 4670 | 4030 | 640 | 86.30 |
| 2012-13 | 5307 | 5293 | 4640 | 653 | 87.66 |
| 2013-14 | 6690 | 6671 | 5794 | 877 | 86.85 |
| 2014-15 | 6108 | 6098 | 5327 | 771 | 87.36 |
| 2015-16 | 6577 | 6558 | 5791 | 767 | 88.30 |
| 2016-17 | 6385 | 6373 | 5711 | 662 | 89.61 |
| 2017-18 | 6850 | 6841 | 6073 | 768 | 88.77 |

The above data is only for existing four labs. Out of the 06 newly established labs 02 labs are notified and started functioning, remaining 04 labs are under process. Taking mean of sample analyzed during 2017-18 the total sample will be analyzed to the tune of about 17100 in the incoming years.

- 7. **Lesson Learnt:** The data shows that 05 project pertains to the strengthening of fertilizer testing labs have been sanctioned and implemented during the period 2007-08 to 2015-16. The lesson learnt from the implementation of these projects can be summarized as below:-
 - The project report prepared for such purpose should be so detailed that every aspects like total component wise requirement, their actual cost, implementing agency, source of procurement, who will do what, and funds requirement from day one of financial to last day of financial year etc should be clearly defined.
 - As now it is a established fact that new building construction takes at least 15 to 18 months to complete it, therefore the cost should be phased out in such a manner that only actual fund required should be transferred to the implementing agency remaining part should be given in next financial year. This way utilization certificate will be sent easily and project will be completed as it is designed.
 - As manpower is essential to run the lab, therefore it is understood that all parameters like building construction, procurement of essential equipment, furniture, and sanction of manpower should go parallel, than only one lab can be established in a true sense.
 - It is also observed that at the time of preparing the project it should also be considered that whet are the purchase power of various authorities so that sanctioning of various items should not be delayed or linger on.
 - ➤ It is also observed that looking to the number of cases against which the action has been taken, Diploma in Agriculture Extension Services for Input Dealers (DAESI) program will be extremely useful

8. Supporting Quotes and Images:-



9. Additional Information:- The contact address of the officer in-charge for implementing this project is as given below:-

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