UNNAT BHARAT ABHIYAN INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI – 110016

MINUTES OF THE 2nd MEETING OF THE NATIONAL STEERING COMMITTEE HELD ON 06th OCTOBER, 2016 IN THE SENATE ROOM OF IIT DELHI.

PRESENT:

Dr. Vijay P. Bhatkar - Chairman
 Prof. V. Ramgopal Rao - Co-Chairman
 Prof. Kshitij Gupta - Co-Chairman

Dr. R.A. Mashelkar - Member
 Prof. Geeta Bali - Member
 Prof. Gopal K. Nayak - Member
 Dr. B.S. Negi - Member

Smt. Ruchika Kem - AICTE nominated representative
 Dr. Neetu Bhagat - AICTE nominated representative

10. Dr. (Mrs.) K.S. Sethi - Nominated by AYUSH

11. Shri. N. Choudhary - Nominated by Min of DW& S
12. Shri. V.L.V.S.S. Subbarao - Special Invitee (MHRD)

13. Shri Jay Kumar - Special Invitee

14. Prof. Rajendra Prasad - Special Invitee, Adviser UBA IITD
 15. Dr. Sandeep Chatterjee - Special Invitee, Registrar IIT Delhi

16. Prof. V.K. Vijay - National Coordinator UBA

Dr. Anil Sahasrabudhe, Prof. Ved Prakash, Shri P.N. Ranjeet Kumar, Shri Lalit Kapur, Shri Sameer Kumar, Dr. Ajay Kumar, Shri N. Sivasailam, Shri R. Shubramaniam, could not attend the meeting due to pre-occupation.

Shri. V.L.V.S.S. Subbarao, Economic Advisor (MHRD), Prof Rajendra Prasad, Adviser UBA IIT Delhi, Shri Jay Kumar, Organisational Secretary (Vijanan Bharti) and Dr. Sandeep Chatterjee, Registrar, IIT Delhi attended the meeting as Special Invitees.

Before taking up the Agenda, Prof. Ramgopal Rao, the Co-Chairman of NSC welcomed all the members and informed that UBA activities can be further expanded at large scale at the new campus of IITD coming up at Jhajjar (Haryana). He emphasised on new initiatives of IIT Delhi in which interdisciplinary projects are provided with seed grant to facilitate the

interaction between the faculties of different departments/centres with a focused objective. He also stated that now we should think beyond publishing research papers and IITs need to connect more to Society through the platform of UBA.

The Chairman, welcomed the members & Special Invitees of the Committee and talked about the challenges in front of UBA. After the last meeting held on 29-4-2016 various Ministries have been requested to involve in UBA Programme in a larger perspective. He briefed about the genesis of UBA Programme and also milestones achieved up to date. He made brief remarks about the rural development centers like CRDT at IITD and others, and such other initiatives taken across the country long back. In spite of that the village development has not taken place. He emphasised on the following:

- School level education should be improved.
- The village development schemes of various ministries should be converged.
- Large Indian population are living in villages and suffering from poverty & hunger which is leading to unemployment and migration.
- How to improvise the situation? Similar to providing appropriate technologies as done by Agricultural institutions during green revolution. The revolution has to move now towards evergreen revolution.
- Large number of rural problems should be addressed using appropriate technology with the help of educational/technical institutions.
- The UBA Programme should be initiated at State level such as Unnat Maharashtra
 Abhiyan. Similar interest has been shown by Chhatisgarh and Haryana.
- Bottom-up approach should be followed to identify the problem at village level.
- Cultural and spiritual transformations should come to villages.
- Participation of UBA in upcoming IISF at Pusa Campus to take science and technology to the people, students and youths, particularly rural areas.

Opening remarks by Dr. R. A. Mashelkar

He started by saying that UBA is an inspiring mission. He highlighted that UBA is a Unnat Bharat Abhiyan and not Unnat India Abhiyan, therefore focused on rural areas rather than elite and urban areas. He praised the vision statement of UBA "Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India". Some of his thoughts expressed in the meeting are as under:

- He emphasised on the word "transformational change" that is not an incremental change but a rapid change and catalysing inclusive accelerated growth that the program envisaged.
- We need all the three, expansion-inclusion-excellence. It is difficult to achieve
 excellence along with expansion and inclusion, however UBA has an opportunity
 to demonstrate how to make this impossible looking dream possible.
- Integration of knowledge institutes and grass-root level innovations. One has to combine the informal system with the formal system of education and innovations.
- He emphasised that this has to be a core activity and not a fringe activity.
 He mentioned about how in Academy of Scientific and Innovative Research, of which he was a chancellor, every Ph.D. student was mandated to spend 8 weeks in a village to provide a solution to a rural problem and how credits were given.
- We have to combine excellence with relevance. On one hand institutions like IIT have to maintain their excellence but at the same time have to be relevant to the people of the country. This is possible to match the two, because in the process it is not only the villages that will be the benefited but institutions are themselves going to be benefited learning from the realities of life, picking up real problems and trying to find solutions. It is a win win situation for both sides.

- He emphasised on three important words "Speed Scale Sustainability" to be taken care for the successes of the program.
- He emphasised that innovation is doing things differently. But the challenge before us is, can we do it dramatically differently and not only making a difference but making a big difference.

Opening remarks by Sh. V.L.V.S.S. Subbarao (Economic Advisor, MHRD)

He gave a brief introduction of UBA Programme launched by MHRD. Some of the suggestions made by him are as follows:

- Bottom-up approach The problems should be identified at village level.
- The UBA Programme needs to be driven from the top at the initial phase.
- At first it requires assistance from District Collectors who will help in identifying the village clusters owing to their full familiarity with backwardness etc.
- To speed up the programme, Zonal Level meetings are proposed to be conducted in four zones into which the 89 districts of Phase I of UBA are divided. During this interaction, District Collectors would be requested to come with identified village clusters, if possible and there will be a direct interaction between Participating Institutes and District Collectors, along with the MIs and CI.
- The PIs, with the supervision of the MIs, will conduct field visits, assess the local requirements, come up with solutions using their knowledge and prepare a cluster level action plan in consultation with the Collector and submit the same to the District Collector. The Action Plans are the primary deliverables of the Institutions and should reflect the knowledge inputs. District Collectors will be expected to incorporate these village plants in their overall developmental plan.

Convergence of the resources and schemes in respect of rural development

would be envisaged and funds should be harnessed from other sources such as

corporate social responsibility and other Ministries.

He requested NSC Chairman to fix a timeline for this process of village cluster

identification.

He also enquired as to what can be achieved under the programme by Republic

Day 2017 – What could be a realistic target?

He suggested that IITD the CI may develop an interactive website of UBA at IIT

Delhi so that it can generate data that flows from the activities of the field visits of

PI and upwards.

Institutes should visit clusters, liaison with the District authorities, people and local

bodies in the area and complete field study within a specified period. He

suggested end of November as the deadline for identification of all clusters in 89

districts.

He also mentioned that UBA is a process oriented scheme where the needs and

solutions are ascertainable after field assessment only and no ready to use

solutions should be imposed upon the villages.

Agenda Item 1: Background: Presentation made by IIT Delhi.

Prof. V.K. Vijay, Coordinator, UBA, IIT Delhi presented the background and spoke about the

1st meeting of NSC of UBA held on 29.04.2016 along with the steps / action taken for Unnat

Bharat Abhiyan. A copy of the presentation as discussed during the meeting is placed at

Appendix – I.

Agenda Item 2: To confirm the minutes of 1st Meeting of National Steering

Committee held on 29th April, 2016.

The minutes of the 1st meeting of the National Steering Committee held on 29.04.2016 were confirmed, as circulated.

Agenda Item 3: To receive a report on the action taken on the decisions of the 1st meeting of the National Steering Committee.

The committee received the report on the action taken on the decisions of 1st meeting of the NSC as presented by Prof. V. K. Vijay (**Appendix – I**).

(i) To discuss the current status – present functioning – of UBA (Item 2(1)).

The Committee was apprised that seven new members were included in the NSC of UBA.

A copy of MHRD letter F. No. 9-1/2016-UBA dated 09.08.2016 is placed at **Appendix – II**.

(ii) <u>To discuss Funding Status and Needs (Item 2(2)).</u>

The Committee was apprised that a detailed project report (Proposal) for UBA (Appendix-III) had been submitted to MHRD for funding for three years with total budget of Rs. 100 Crores. The proposal is for Rs 10, 35 and 55 crores for I, II and III year, respectively. It was informed that the amount of Rs. 10 crores has been sanctioned by the Ministry for the year 2016-17. An amount of Rs. 1.66 crores has already been released by the Ministry to IIT Delhi as the first instalment (in July 2016) this year for Unnat Bharat Abhiyan. Major part of fund will be disbursed to Mentoring Institutes (MIs) and Participating Institutes (PIs).

The coordinator explained that to participate in India International Science Festival 2016 (IISF 2016) organized by Ministry of Science and Technology, Govt. of India is one of the activity also proposed in the proposal in addition of capacity building programmes of MIs and PIs. The prime objective of the science festival is to expose the fruits of Science and Technology to the masses, building strategy to instil scientific temper among people, aims to provide a platform to young scientists across the globe for the exchange of knowledge

and ideas. IISF 2016 aims to support and popularise flagship programs like "Swachh Bharath Abhiyan", "Make in India", "Digital India", "Smart Villages", Smart Cities", Namami Gange", Unnat Bharat Abhiayn", etc. initiated by the government.

The coordinator explained the purpose of the participation in IISF. This would be a great opportunity to showcase innovative technologies developed by different institutions, relevant to rural areas and ready for implementation under UBA. The Director IIT Delhi Prof Ram Gopal Rao has written to all concerned institutions like IITs, NITs, IISERs, IIMs, Central Universities, etc. to identify such technologies and send a brief to IIT Delhi for screening.

Sh. Subbarao didn't appear to be convinced and sought more clarifications on the subject. The co-chairman NSC, Prof K. Gupta then explained how the event had gone last year that had been organized at IIT Delhi where more than a lakh school children and others had participated. The Advisor UBA, IIT Delhi Prof Rajendra Prasad also explained that this will help bring together the innovative technology developed by the various institutions participating in UBA which then could be taken up by other UBA participants for implementation in their areas of operation.

Sh. Subbarao still insisted that this is the activity not to be taken up this year and may be looked into later years.

Dr. Mashelkar made a strong point that the approach should not be this or that, rather it should be this and that. It will be greatly beneficial to assess as to where we stand, what technologies with potential impactful rural applications are available, how could they be fine tuned to suit the varied requirements of the country. We have to be open to take several steps in parallel and not sequentially.

Sh. Subbarao again objected to the participation in IISF in the current year. He believed that institutions like IIT need to be taken out of the mindset that technology is the solution for the rural problem. They should rather go the rural areas, learn from the field and then see if there is some technology required to solve the problems. They can easily and quickly report about any technology but how to apply them in real life, they may not be clear about that and the process may be much longer. This is what has to change. They should not start with technology, but visit and understand the rural areas first, identify the problems and then look for the solutions.

Dr Mashelkar felt that there should be a suitable blend of both supply driven and demand driven approach. He said that he will be happy to speak to the minister about the desirability of such a dual approach.

Sh. Subbarao said that what he has opined about the UBA process and the need for knowledge institutions to develop an understanding of the scheme process is central to the programme success and activities like the science festival where students are the visitors, do not address any of the UBA priorities. There is no mass dissemination to the target areas as stated by others earlier. He saw no relevance at this stage of the science festival. He also said that the fact that IITs etc. have not yet carried out field visits but are already coming up with readymade technologies to thrust onto villages is undesirable and gos against the objectives of the scheme. This was a considered opinion in the Ministry too.

Dr. Bhatkar again tried to elaborate that the event would help take science to the people and UBA is participating to bring the various stakeholders, the policy makers, the scientists, the researchers, the institutions, the students, the farmers, the villagers etc. to come

together and share a common platform to look at the innovative solutions/technologies how they could benefit the masses at large.

Dr. Mashelkar then gave a number of examples where innovative technologies had driven the solutions of various problems which the users in a rural setting themselves could not have conceived. These included Ultra low cost (Rs. 5 per use) simple ECG and (Rs. 10 per test) haemoglobin (non-invasive) diction test that can be used in villages. Also a non-invasive breast cancer detection for just one dollar (i-breast exam) that can do massive screening (Rajasthan has recently agreed to screen 5 lakhs women). Such technologies are supply driven. Villagers could not have demanded these! So they need to be exhibited first and then drive their use-not the other way round that Sh. Subbarao was suggesting. Hence UBA should move in parallel in both fronts from field, identifying the needs and problems as well as identifying the innovative technologies from the research institutions and look for their applications in real life.

Dr Bhatkar, Prof Ram Gopal Rao, Prof. Gopal Naik and others strongly supported Dr Mashelkar's view point and added several more examples to the concept.

Sh. Subbarao said that there is a time and place for everything, if such exposures takes place at districts and village level he has no objection to it. However, organizing at the national level has not merit and should be therefore be deferred.

The chairman, Dr Bhatkar said that NSC has been empowered by the ministry to take such decisions and as Chairman NSC he had already promised for the participation of UBA in IISF.

Sh. Subbarao strongly objected to that and said that if the NSC Chairman feels he is empowered to take decisions in the NSC even without the concurrence of the Government representative he would not mind opting out of the membership of the committee in that case, but would find some other method of monitoring the action of both the Committee and UBA. Since the approach of the Committee is at variance with the basic ideology of UBA.

He insisted that the issue be deferred. If the chairman or Dr. Mashelkar wants to speak to the Minister in this regard, they may do so and mention that what Sh. Subbarao said was a considered opinion of the ministry. Dr. Mashelkar said, he would definitely speak to the minister in this regard. The decision on the issue therefore was deferred during the meeting.

After the NSC meeting, in the evening, the Chairman Dr. Bhatkar received a telephone call from Ministry representative who discussed the above issue with him. He told the chairman on phone that UBA should go ahead with the participation in the IISF as planned. In summary, therefore, this was taken as a formal and final view of the Ministry and the decision of NSC to go ahead with the IISF stands with this approval given by him on behalf of the Ministry.

The matter was discussed in the Ministry. The view of the Ministry invitee may be recorded as follows:

"The proposal in respect of the Science festival in IITD is one of the items reflected in the fund flow approval. However no detailed agenda note was attached to the agenda on this item with a detailed justification for its being conducted. The discussions also failed to point out how an exhibition in New Delhi at this stage could reach out to the masses in the villages and not be an IIT centric event. However, in view of the prior inclusion in the earlier approval, it is being concurred subject to the following:

- (i) The various organisations dealing with Rural Development in Delhi and surrounding places would be invited to the festival and the UBA pavilion and given suitable knowledge about the technologies on display.
- (ii) The technologies on display should carry relevant information on their adaptability to field situations in rural India
- (iii) The science festival would be reviewed after its completion in terms of the expenditure spent on it and the outcomes achieved vis-a-vis the processes and priorities of the UBA.
- (iv) It would not be automatically approved for the next year but specific approval of the Ministry would need to be sought, providing justified results of its conduct during the current year.

(iii) Operational issues and strategies (Item 2(3)).

I. Workshops organized

The NSC was informed that the following Workshops were organized:

- a) A video conference under the Chairpersonship of Secretary(HE) was held on 21/05/2016 with various stakeholder arranged by Ministry of Human Resource Development and State Secretaries of Higher Education, District Collectors of 89 Districts identified in first phase, NSS Coordinators and UBA Coordinators of participating Institutes.
- A workshop on UBA- Activity Planning for Mentoring Institute and Subject Expert Group Coordinators was organised by Unnat Bharat Abhiyan IIT Delhi on 22nd 23rd Aug. 2016.

The committee noted with satisfaction.

(b) The current functioning, status of the various activities of UBA were discussed in the meeting in detail.

The committee noted with satisfaction.

(d) UBA Expansion

There should be a minimum criteria to be set by UBA for participating institutions in order to include in UBA structure. There should be transparent guidelines/norms for selecting participating institute in UBA need to be evolved.

It was deliberated on cluster identification and committee suggested to target the remote villages. It was also emerged out of discussion that participants from NIFTAM, NIAM, AYUSH should be included at various levels of UBA.

(e) Mentoring and Subject Expert Group Institutions

The committee noted with satisfaction. However list of Subject Expert Group (SEG) and Mentoring Institutes (MIs) are placed at **Appendix – xx.**

(f) Brochure/ booklet Development

The committee was apprised that achievement in spreading the message of cleanliness and hygiene by Centrally funded Technical Institutions (CFTI's) in the country. The report was compiled by UBA, IIT Delhi and developed as a booklet. This booklet was released by Secretary MHRD to media and public on 22nd September, 2016 in MHRD along with the Secretary, Drinking Water and Sanitation.

Regarding UBA Brochure, Sh. Subbarao pointed out that it should be released only after certain work has been done at cluster level, by including village cluster level progress.

(iv) Outcome expectation from UBA during next three years (Item 2(4)).

The Committee deliberated on the issues like how to measure the output and outcome of the programme after three years. It was also suggested that to develop/identify some parameters through which a scale can be designed to determine the progress / success of the programme.

Agenda Item 4: To discuss the current Status Report of UBA Activity.

Prof. Rajendra Prasad, Advisor UBA, IIT Delhi made a presentation before the committee. A copy of the presentation as discussed during the meeting is placed at **Appendix –IV**.

After the presentation the committee deliberated on the current status of the programme and it was decided to identify the village clusters in all 89 districts by November, 2016

Agenda Item 5: To discuss the Next plan of action.

Prof. Rajendra Prasad, Advisor UBA, IIT Delhi presented the item. A copy of the presentation as discussed during the meeting is placed at **Appendix – V.**

After the presentation, it was decided that the MoUs to be signed between CIs and MIs, MIs and PIs are to be discussed with the MHRD to include MHRD viewpoint and approval. The training manual should be prepared and circulated in order to guide PIs & MIs regarding the process of programme in consultation with MHRD.

Coordinator, UBA requested Chairman, NSC to form a sub-committee of NSC to accelerate the process of screening proposals and also to take actions and decision in a fast manner.

The program implementation committee suggested and approved by NSC is as follows:

- 1. Dr Vijay Bhatkar, Chairman NSC
- 2. Director IITD Co-Chairman, NSC
- 3. Dean (R&D), IIT Delhi
- 4. Prof Rajendra Prasad , Adviser, UBA IIT Delhi
- 5. Sh. Jay Kumar, Vijanan Bharti
- 6. Coordinator, UBA, IIT Delhi
- 7. Registrar IIT Delhi

Dr. B. S. Negi said that the evaluation of renewable energy systems being promoted in villages to be identified and to make the impact assessment of these technologies with analysis and recommendation that how these technologies can be further improved and

scaled up for improving the quality of lives in rural areas. Further he added that both Prof. Rajendra Prasad and Prof. V.K. Vijay, IIT, Delhi are knowledge partners of MNRE in cookstoves and biogas and therefore the impact assessment and relevance of these technology options in field will help to take further steps for technology development and promotion of the improved technologies for addressing the energy and health concerns in rural areas.

These suggestions was appreciated for implementation in the UBA Programme by Dr. Mashelkar, Sh. Subarao and other Members of NSC including the Chairman. In addition, it was also suggested and discussed that a baseline will need to be drawn to ascertain the state of the villages which will be selected for implementation and accordingly deliverables/outcome to be decided which will be monitored by the NSC. Also a strategic plan of action utilising the local resources and scheme already being implemented need to be utilised to meet the objectives and goal of UBA as early as possible.

Agenda Item 6: Implementation and monitoring workshop at four zones (IIT Delhi, IIT Kharagpur, NIRDPR and IIT Bombay) with district collectors, Mentoring institutes and Participating institutes.

Prof. Rajendra Prasad, Advisor UBA, IIT Delhi presented the item. A copy of the presentation as discussed during the meeting is placed at **Appendix – VI.**

The committee was informed that the first zonal level (North Zone) workshop will start from 20th Oct. 2016 and is coordinated by IIT Delhi as per the guidelines given by the MHRD and workshops for other zones will be done as per schedule.

Agenda Item 7: Discussion on State level initiatives: Maharashtra, Uttar Pradesh and Haryana, close to IITD as pilots.

Prof. Rajendra Prasad, Advisor UBA, IIT Delhi presented the item. A copy of the presentation as discussed during the meeting is placed at **Appendix – VII.**

The NSC deliberated and by quoting the Unnat Maharashtra Abhiyan envisaged the importance and recommended State Level participation in UBA Programme.

Agenda Item 8: Discussion on Convergence of various schemes.

The discussion on various schemes related to rural development was made and the committee felt that a proper mechanism should be developed to identify and converge the related schemes and its utilisation at base level activities of Unnat Bharat Abhiyan.

Agenda Item 9: Discussion on Strategy for fast track program implementation and constitution of program implementation committee.

Prof. Rajendra Prasad, Advisor UBA, IIT Delhi made a presented on Strategy for fast track program implementation. A copy of the presentation as discussed during the meeting is placed at **Appendix – VII.** The committee noted with satisfaction.

Agenda Item 10: Discussion on Implementation of open architecture system for UBA.

The committee deliberated on implementation of open architecture system for UBA and suggested to identify and implement a minimum criteria for participating institutions in order to include in UBA structure. There should be transparent guidelines/norms for selecting participating institute in UBA need to be evolved. Any knowledge institution wanting to join UBA should be welcomed if it satisfies the norms.

Item No. 11: Discussion on Program outcome and criteria for success.

The committee deliberated on Program outcome and after detailed deliberations it was suggested to develop/identify some parameters through which a scale can be designed to determine the progress/ success of the programme.

<u>Item No. 12: Discussion for curriculum development and reorientation in academic institutions</u>

IIT Bombay is the coordinator of Subject Expert Group "Capacity Building & Change in Ethos in Technical Institutions" and forwarded two recommendations related to this subject group for consideration of NSC:

- Development Engineering agenda (Part A) and its sub recommendations be made to MHRD for discussion and adoption by CFIs.
- MHRD and development departments such as MoRD, MDWS etc evolve and support mechanisms (Such as Unnat Maharastra Abhiyan of part B) for partnership between the state governments and regional institutions.

The NSC was in agreement with these recommendations and felt that this should be deliberated in detail in the next meeting before arriving on any recommendations.

Any other Item

1. Mr. Abhay made a brief presentation on "Smart India Hackathon 17" – How students can be involved in UBA activities". He briefed about the program to NSC and given advantages of UBA participation in this program. Through this program a solution for a typical problem can be found within 36 hours by young minds of India. The committee suggested UBA to participate in this program as it is now also a part of MHRD. The Ministry is not in concurrence with this idea. UBA need not participate in this initiative since the Ministry is already doing so.

The meeting ended with a vote of thanks to the chair.

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