

**MINUTES OF THE 15TH MEETING OF THE IMPLEMENTATION COMMITTEE FOR
REORGANIZING THE FEDERAL GOVERNMENT
HELD ON 10-12-2019**

The 15th meeting of the Implementation Committee was held on 10-12-2019 at 10:00 a.m. in **Institutional Reforms Cell (IRC), the P.M. Office**. It was chaired by Dr. Ishrat Husain, Advisor to the Prime Minister on Institutional Reforms and Austerity. The list of the participants is at Annex-I. The agenda of the meeting was as under:-

- (i) Presentation by Ministry of Science & Technology on proposed roadmap
- (ii) Presentation by Ministry of Federal Education and Professional Training on proposed roadmap.
- (iii) Views / comments of the Ministries/Divisions on the proposed Executive Departments (Annex-7) and proposed Autonomous Bodies (Annex-8).

2. The meeting started with the recitation from the **Holy Quran**. The Chair welcomed all the participants and opened the discussion. He highlighted that in the current times the Ministry of Science and Technology has become extremely important since it needs to spearhead the development of science of technology in the country. In order to achieve this there is a critical need to reorganize and revitalize the Ministry on the lines of international best practices. The Chair then stated that the present system of Research and Development under the Ministry of Science and Technology (S&T) is highly fragmented and lacks focus. There is a lot of duplication of efforts in the system due to lack of coordination. Furthermore, little attention is being paid to the promotion of applied sciences and technologies for solving the real problems being faced in the different sectors of the national economy. At the Federal level, there is no coordination between Defence and Civilian research organizations. Moreover, within the civilian structure, there is a weak link between the Federal and provincial governments. The 21st century is the century of knowledge economy and therefore there is a need to rethink about the functions of Ministry of S&T in a holistic manner rather than to persist with the current silo based mindsets based on turf protection by different R&D organizations. The Chair further stated that the vision of the national research ecosystem should be developed to build capacity for innovation and then the application of innovation in key sectors of the economy to improve competitiveness of Pakistani economy and also to enhance the living standards of citizens of Pakistan. There is very little possibility for socio economic progress unless we reform the national ecosystem for science, knowledge creation and holistic application of modern technologies.

3. The Chair then elaborated on his proposed strategy and informed the committee that the reforms should begin with the teaching STEM subjects in our schools and by making science education interesting, experiential and focused on application to real world problems. In the next stage, the national colleges and universities should create more facilities and increase enrollment in science related subjects particularly in Life Sciences, Natural sciences, ICT, and other emerging technologies. Faculty members should be attracted from the best universities in the world and allowed liberal research funding for setting up their own labs. Public Research Institutes should form integral part of the respective sectoral Ministries which will assign pressing real world problems to these institutes to find the solutions. New incentives will have to be introduced to attract and retain talent in these research institutes as was the case in early 60s and 70s. Pakistan's expenditure on R&D is negligible in relation to the country's requirements and has been drastically cut down since the 1990s. Government has to increase allocations but the funding will be linked directly to output and performance.

4. To bring about this shift and implement the stated strategy there is a need to create an apex high powered National Science and Technology Commission (NSTC) headed by the President of Pakistan and consisting of the Federal and Provincial Ministers of all S&T related ministries including Defence Production and SPD. The NSTC will also have private sector representatives and a few eminent scientists. The NSTC would be the highest direction setting body integrating the efforts in all areas of S&T in the country under a unified national platform. The MoST would act as the Secretariat of this Commission and would be assisted by an Executive Committee consisting of the Secretaries of key ministries including Agriculture, Energy, Industries, ICT, Water Resources etc., Chairman HEC and senior heads of leading S&T organizations. For this purpose, the present structure of MoST has to be completely revamped and a new organizational architecture has to be established. The MoST will be drawing its mandate from the NSTC and will also be collaborating with bilateral, regional and international scientific organizations. The details of the proposed functions and responsibilities of the reformed MoST is placed at Annex-II.

PROPOSED ACTION PLAN FOR RESTRUCTING OF THE M/o S&T

5. The proposed Action Plan given by the Chair was as under:-

- i. Make the Pakistan Science Foundation (PSF) the funding arm of NSTC for all R&D support from the Federal Government. This can be initiated by making an endowment

fund of Rs10billion for PSF. HEC funding for R&D may also be linked to recommendations of PSF.

- ii. Pakistan Council of Science and Technology (PCST) should be redesigned for promotion of STEM education and scientific literacy, National Science Parks, Technology Parks, National Science Research Centers. Five-year funding for these initiatives has to be committed through PSDP, Provincial ADPs, Private sector and international donor agencies.
- iii. Both PSF and PCST should be strengthened by increasing the numbers of quality and experienced scientists, making them financially and operationally autonomous, raising their annual budget and offering MP1 scales to the heads of these institutions.
- iv. Reorganize the Secretariat of MoST by setting up separate cells for (a) Policy formulation, monitoring and implementation including Human resource Development of Scientific manpower (b) Industry-academia-research institute-Technical and vocational training linkages; (c) coordination between Federal ministries and their research institutes and provincial departments and their institutes, universities, Technical and Vocational training institutions and R&D organizations; (d) International cooperation and exchange programs.
- v. Transfer the existing sector specific research institutions to respective sectoral ministries to forge linkage between application of research to policies and programs. However, the governance structure of all these bodies has to be revisited:-
 - a) PCSIR to Ministry of Industries
 - b) PRCWR to Ministry of Water Resources
 - c) PSQCA to be placed with Cabinet Division as other regulatory authorities
 - d) CWHR to Ministry of Works and Housing
 - e) NIO to Ministry of Maritime affairs
 - f) NIE to Ministry of ITT and PCRET to Ministry of Energy
 - g) PHA to Ministry of Commerce
 - h) COMSAT, COMSTECH, ECO Science to Ministry of Foreign Affairs
 - i) STEDEC can play a major role in commercialization of patents and innovations

6. After this Chaudhry Fawad Hussain, Federal Minister for Science & Technology was invited to share his views with the Committee on the proposed reorganization of the Ministry. He stated that he agreed with the problems identified by the Chair but was not in complete agreement with the proposed solution and reorganization. He stated that the

incumbent Government was also well cognizant of the importance of S&T sector for socio-economic growth in the country. The Federal Minister expressed his conviction that MoST was the national focal point for planning & coordination of S&T programmes and this role needs to be further strengthened. He went on to say that the process of disintegration of S&T started in 1972, when PAEC and SUPARCO were detached from MoST which resulted in disconnect of Civilian and Defense R&D. He informed the forum that National Commission on Science and Technology (NCST) was already created in 1984 under the Chairmanship of the Prime Minister of Pakistan. Pakistan Council for Science and Technology (PCST) acts as the Secretariat of NCST. He further stated that Executive Committee of NCST called ECNCST was also established in 1989 and Federal Minister for S&T is its Chairman. He elaborated that Ministry has recently taken a number of steps to resolve the issues as pointed out by the Chair. He further suggested that CWHR may be merged with PCSIR and PASTIC may be merged with PCST.

7. After this there was a general discussion between the Members of the Committee and the representatives of the Ministry. The Minister seconded the comments of the Advisor by agreeing that 567 national R&D institutes are mostly underperforming. The Committee observed that one of the major causes of this inefficiency was the lack of coordination and focus. The committee recommended a holistic and integrated approach to reinvigorate these institutes. It was stressed that the Ministry of Science & Technology should also address the recent negative trend of students opting for non-science subjects in public universities. The example of Karachi University was cited. The Committee emphasized that the Ministry needs to foster the interest of nation's youth in new emerging technologies. The Committee also observed that there is an urgent need to increase funding for R& D and promote higher education in Science and Technology.

8. The Federal Minister of Science & Technology then informed the Committee that the Ministry has taken some new joint ventures with private sector in the areas of biotechnology, herbal extraction, alternative medicine and hydroponics. He also apprised the Committee that the number of schools in which STEM subjects are being taught has increased from 150 to 400 during recent years. On the query of the Committee about his reservations on the proposal of the Chair, the Minister stated that primary objection of the Ministry is on the transfer of sectoral R&D departments present in Ministry of Science & Technology to other Ministries. Secondly he also disagrees with the transfer of executive powers of the NCST from

the Prime Minister to the President. He also stated that another important problem he has been facing is the non-appointment of heads of a few departments in M/o S&T on MP-I scale. In response the Chair stated that he has only proposed the transfer of sectoral R&D institutes to the relevant Division as per the international best practices. He further stated that if the proposed plan is accepted it would lead to a large expansion in scope of the Ministry even without these institutes. He further informed that M/o S&T was facing problems in finding suitably qualified candidates to head various institutions, due to the lack of specialist domain knowledge amongst the candidates, shortlisted for these positions. There is a need to re-advertise these positions at the earliest so that expert specialists can be selected to make these institutes functional.

9. Special Assistant to the Prime Minister on Petroleum emphasized the need to connect industry with the academia and public research institutes in the country. He further explained that applied research should be promoted by the Federal Government and it should also facilitate its dissemination in the industry. The Committee after deliberation decided to give the Ministry three weeks to develop and present a new business/re-organizational plan in light of the proposal of the Chair and the discussion during this meeting.

10. **Agenda No.ii. Ministry of Federal Education and Professional Training:-**

- a. The Technical Advisor of the Ministry stated that in order to improve the Ministry's performance, it is proposed to reorganize some of the organizational entities present. AEPAM and NEAS will be merged into a new Education Policy and Research Unit (EPRU). The Ministry agreed with the proposal to merge Pakistan Manpower Institute (PMI) into Human Development Policy Institute (HDPI) as proposed in the Annex-6 of the Report.
- b. Regarding the proposals in Annex-3 of the report, the Federal Minister for Federal Education and Professional Training stated that the Ministry agrees in principle to the transfer of the following institutes to ICT Metropolitan Corporation, once new local government system is put in place.
 - i. Federal Directorate of Education (FDE)
 - ii. Directorate General of Special Education
 - iii. Federal College of Education
 - iv. Federal Government Polytechnic Institute of Women, Islamabad
 - v. Sir Syed Schools and College of Special Education

- vi. Federal Government College of Home Economics & Management Sciences
- vii. Basic Education Community Schools (BECS)

11. **Agenda No.iii:Views and comments by Cabinet Division, M/o Climate Change and M/o Human Rights on proposed Executive Departments and Autonomous Bodies as given in Annex-7 and Annex-8 of the Report.**

- The part related to Cabinet Division was not discussed.
- No one participated from M/o Climate Change.

M/o Human Rights

The representative from the Ministry stated that the Ministry has no objection on the proposed categorization as under:-

Executive Departments

1. Family Protection & Rehabilitation Centre for Women
2. National Child Protection Centre (NCPC)
3. Implementation of National Plan of Action (INPAC)
4. National Commission for Child Welfare & Development (NCCWD)

Autonomous Bodies

1. National Commission for Human Rights (NCHR)
2. National Commission on the Status of Women (NCSW)

Decisions

- i. The Ministry of Science & Technology will present their business / restructuring plan to the Committee after three weeks.
 - ii. The Committee approved the merger of Pakistan Manpower Institute (PMI), M/o Federal Education & Professional Training into the proposed Human Development Policy Institute (HDPI).
 - iii. The Committee agreed with the proposal of M/o Federal Education & Professional Training against winding up National Education Assessment System (NEAS). It was decided to merge it with Academy of Education Planning and Management (AEPAM) and create the new autonomous body of Education Policy and Research Unit (EPRU) under the Ministry.
 - c. The Committee decided in principle to transfer the following departments of M/o Federal Education & Professional Training to Islamabad Metropolitan Corporation, once the new local government system is put in place:-
 - i. Federal Directorate of Education (FDE)
 - ii. Directorate General of Special Education
 - iii. Federal College of Education
 - iv. Federal Government Polytechnic Institute of Women, Islamabad
 - v. Sir Syed Schools and College of Special Education
 - vi. Federal Government College of Home Economics & Management Sciences
 - vii. Basic Education Community Schools (BECS)
 - iv. The Committee agreed to categorize the following departments of M/o Human Rights as Executive Departments:-
 - i. Family Protection & Rehabilitation Centre for Women
 - ii. National Child Protection Centre (NCPC)
 - iii. Implementation of National Plan of Action (INPAC)
 - iv. National Commission for Child Welfare & Development (NCCWD)
 - v. The Committee agreed to categorize the following departments of M/o Human Rights as Autonomous Bodies:-
 - i. National Commission for Human Rights (NCHR)
 - ii. National Commission on the Status of Women (NCSW)
12. The meeting ended with a vote of thank from the Chair.

**List of participants of the 15th Meeting of Implementation Committee
held on 10-12-2019**

- i. Dr. Ishrat Husain, Advisor to the PM on Institutional Reforms & Austerity.
- ii. Mr. Shafqat Mahmood, Minister for Federal Education & Professional Training.
- iii. Chaudhry Fawad Hussain, Minister for Science & Technology.
- iv. Mr. Nadeem Babar, Advisor to the PM on Petroleum.
- v. Mr. Mohammad Shehzad Arbab, Advisor to the PM on Establishment.
- vi. Mr. Muhammad Ali Shahzada, Special Secretary, Establishment Division.
- vii. Dr. Safdar Sohail, Special Secretary, Cabinet Division.
- viii. Capt. (Retd). Nasim Nawaz, Secretary, M/o Science & Technology?
- ix. Dr. Arshad Mahmmod, Additional Finance Secretary, Finance Division.
- x. Ms. Umbreen Arif, T.A. M/o Federal Education & Professional Training.
- xi. Mr. Umar Aziz Khan, Joint Secretary, M/o Law & Justice.
- xii. Mr. Kamran Rajar, Joint Secretary, M/o Human Rights.

PROPOSED FUNCTIONS AND RESPONSIBILITIES OF MoST

- A unified national platform for S&T management in Pakistan that brings all ongoing public and private research in different sectors under one umbrella i.e. of NSTC
- Formulate national research plans, policies and standards and seek funding from national budget and international donor agencies (creation of endowment funds is recommended so that the funding can be made regular and independent)
- Prioritize within the approved plan and establish Innovation Promotion Fund for financing priority research projects on a competitive basis, appointing expert committees and expert panels and arranging the peer review, supervision, implementation and Evaluation of these research projects
- Plan and oversee the spread of STEM education and supporting infrastructure and teaching faculty at school, college and university levels in close coordination with the provincial education and S&T departments and HEC
- Support professional science academies and associations in their outreach activities and science literacy campaigns particularly using the media and internet
- Develop National Science Centers that include Technology and Science Parks, Museums, national laboratories in emerging technologies with open access and sharing of S&T resources
- Promote collaboration among research institutes, universities. NAVTC, TEVTA and enterprises to undertake research projects applicable to national development priorities and provide funding for Manufacturing Innovation Centers for industrial application of new technologies
- International S&T exchanges and open cooperation in innovation capacity building, bringing in high-end foreign experts in their fields for joint research projects, training and dissemination of new knowledge
- Set up Challenge Funds for young scientists who have just completed their PhD degrees to incentivize them to work on problems and constraints facing different sectors of the economy