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PARLIAMENT OF INDIA
LOK SABHA

COMMITTEE ON EMPOWERMENT OF WOMEN
(2019-20120)

(SEVENTEENTH LOK SABHA)

THIRD REPORT

'HIGHER EDUCATION AND RESEARCH AND DEVELOPMENT – PROSEPECTS FOR WOMEN'

[Action Taken by the Government on the recommendations contained in the Sixteenth Report (Sixteenth Lok Sabha) of the Committee on Empowerment of Women (2018- 2019) on 'Higher Education and Research and Development – Prospects for Women']

LOK SABHA SECRETARIAT
NEW DELHI

March, 2020/Phalgun, 1942 (Saka)

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(SEVENTEENTH LOK SABHA)

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Presented to Lok Sabha on 18th March, 2020

Laid in Rajya Sabha on 18th March, 2020



LOK SABHA SECRETARIAT NEW DELHI

March, 2020/ Phalgun, 1942 (Saka)

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COMPOSITION OF THE COMMITTEE ON EMPOWERMENT OF WOMEN

(2019-2020)

Dr. Heena Vijaykumar Gavit - Chairperson

Members

Lok Sabha

2. Smt. Locket Chatterjee
3. Smt. Sangeeta Kumari Singh Deo
4. Smt. Annpurna Devi
5. Ms. Bhavana Gawali (Patil)
6. Ms. Ramya Haridas
7. Smt. K. Kanimozhi
8. Km. Shobha Karandlaje
9. Smt. Malothu Kavitha
10. Smt. Raksha Nikhil Khadse
11. Smt. Poonamben Hematbhai Maadam
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13. Smt. Jaskaur Meena
14. Smt. Queen Oja
15. Smt. Shardaben Anilbhai Patel
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17. Smt. Satabdi Roy (Banerjee)
18. Smt. Gomati Sai
19. Smt. Sarmistha Sethi
20. Smt. Geetha Viswanath Vanga

Rajya Sabha

21. Smt. Jaya Bachchan
22. Smt. Misha Bharti
23. Smt. Vandana Chavan
24. Smt. Shanta Chhetri
25. Smt. Sarojini Hembram
26. Ms. Saroj Pandey
27. Smt. Kahkashan Perween
28. Smt. Vijila Sathyananth
29. Smt. Sampatiya Uikey
30. Smt. Chhaya Verma

SECRETARIAT

- | | | |
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| 1. | Smt. Kalpana Sharma | - Additional Secretary |
| 2. | Smt. Suman Arora | - Joint Secretary |
| 3. | Shri Ajay Kumar Garg | - Director |
| 4. | Shri Rajesh Mohan | - Under Secretary |

INTRODUCTION

I, the Chairperson, Committee on Empowerment of Women, having been authorized by the Committee to submit the Report on their behalf, present this Third Report (Seventeenth Lok Sabha) on the action taken by the Government on the recommendations contained in their Sixteenth Report (Sixteenth Lok Sabha) on 'Higher Education and Research And Development – Prospects For Women'.

2. The Sixteenth Report of the Committee on Empowerment of Women was presented to Lok Sabha and laid in Rajya Sabha on 13.02.2019. The Ministry of Human Resource Development, Ministry of Science and Technology, Ministry of AYUSH and Ministry of Health and Family Welfare have furnished the action taken replies to the Observations/Recommendations contained in the Report.

3. The Committee on Empowerment of Women (2019-2020) considered and adopted the draft Action Taken Report at their sitting held on 3rd March, 2020. Minutes of the sitting are given at Annexure I.

4. An Analysis of the action taken by the Government on the recommendations contained in the Sixteenth Report (Sixteenth Lok Sabha) of the Committee is given in Annexure II.

5. For facility of reference and convenience, the Observations / Recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI;

3rd March, 2020

13th Phalgun, 1942 (Saka)

DR. HEENA VIJAYKUMAR GAVIT,

CHAIRPERSON,

COMMITTEE ON EMPOWERMENT WOMEN

CHAPTER I REPORT

This Report of the Committee deals with the action taken by the Government on the observations/recommendations contained in the Sixteenth Report (Sixteenth Lok Sabha) of the Committee on Empowerment of Women on the subject 'Higher Education and Research And Development – Prospects For Women' pertaining to Ministry of Science and Technology, Ministry of Human Resource Development, Ministry of Health and Family Welfare and Ministry of AYUSH.

2. The Sixteenth Report of the Committee was presented to Lok Sabha on 13th February, 2019 and was simultaneously laid in Rajya Sabha on the same day.

3. Action Taken Replies in respect of observations/ recommendations contained in the Original Report have been received from the Government. These have been categorized as follows:-

- | | | |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| (i) | Observations/Recommendations which have been accepted by the Government

Recommendation Para Nos.: 2(i), 3, 4, 5, 6, 7, 8, 9(i), 9(ii), 10(i), 11 and 12(ii) | Total: 12
Chapter-II |
| (ii) | Observations/Recommendations which the Committee do not desire to pursue in view of the replies of the Government :

Recommendation Para.: Nil | Total: 00
Chapter-III |
| (iii) | Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and which require reiteration:

Recommendation Para Nos.: Nil | Total: 00
Chapter-IV |
| (iv) | Observations/Recommendations in respect of which the Government have furnished interim replies:

Recommendation Para. : 2(ii), 10(ii) and 12(i) | Total: 03
Chapter-V |

4. The Committee trust that utmost importance would be given by the Government to the implementation of their recommendations. In case where it is not possible for the Government to implement the recommendations in letter and spirit for any reasons, the matter should be reported to the Committee with reasons for non-implementation. The Committee further desire that the Final Action Taken Notes on the recommendations/observations contained in Chapter-I of this Report may be furnished to the Committee within three months of the presentation of this Report.

5. The Committee will now deal with those actions taken replies of the Government, which need reiteration or merit comments.

A. Access to Research and Development

[Recommendation No. 2 (i)]

6. “The Committee believe that equality, inclusion and access are the three pillars which uphold the spirit of education and bridge the gulf between the haves and the have-nots and create an inclusive society. The Committee are happy to note that the Ministry of Science and Technology have ensured that a sizable number of women belonging to BPL/Backward districts/Rural districts/Terrorist and Maoist Infected Area are getting benefit from “science and technology for women” programme. The Committee are further glad to note that women get training of various techniques and processes for income generation which enhance their livelihood. Further, the women scientists scheme of KIRAN (Knowledge Involvement in Research Advancement through Nurturing) has been able to cater to the needs of a significant number of women belonging to backward and terrorism and maoist infested areas, is a positive and significant fact to take note of.

The Committee find that the reply of the Ministry of Science and Technology with regard to the issue of Equality, Inclusion and Access related challenges in imparting education in the secondary

level and this initial handicap is linked with the issue of women participation in higher Education, Research and Development in the country and the context of the regional diversities with respect to women's participation in higher Education, Research and Development has not been replied. The Committee are of the view that being gender neutral would only serve the purpose when there is equality in status and opportunities in terms of financial, social, cultural and educational barriers. Women being a weaker section of the society suffer from the various stereotypes and prejudices which requires an extra effort guided by compassion, empathy and toleration to ensure their equal participation in R&D activities. In its efforts to ensure equality, inclusion and access, the Committee appreciate the fact that the Ministry conducts 'Sensitization' workshops to create awareness among women about various women-specific programmes and also to motivate them to apply under appropriate programmes to get support for research as well as other S&T based activities. DST facilitates travel of aspirant women to attend the Expert Committee Meetings and selected Women get fellowships and/or research project grant based on their qualifications and experience. These practices give the beneficiaries financial freedom and minimize financial burden of family on women's higher education. DST has also initiated Vigyan Jyoti programme which entails counseling of the family members (parents) of the girl child.

The Committee note that efforts in engaging women in research and development is laudable but lack of employment opportunities continue to dampen the spirit towards research and development. Further, the involvement of Civil society and NGOs would help in community sensitization and breaking the social prejudices towards women and create positive attitudes towards R&D. The Committee strongly recommend that in view of the demographic dividend which India continues to enjoy, the integration of Research with employability will be the much needed thrust to engage women in Research and Development activity.

The Committee note that more than 4000 women got financial support under 3 components of women scientists scheme (WOS-A,B and C) and that almost one-third of the women in WOS scheme have regular jobs. The Committee recommend that serious steps be taken to ensure that employability of researchers should be increased to ensure motivation, financial empowerment etc.”

7. The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“The Department has been sensitive to regional diversities with respect to women participation in research and development. The available data of women scientists is critically analyzed and location based interventions are being carried out. Sensitisation workshops are conducted in the areas where women participation is low. Under these workshops, women scientists are not only provided information about Knowledge Involvement in Research Advancement through Nurturing (KIRAN) fellowship programmes but are also exposed to relevant thematic research areas which are more suitable to that particular location by experts. Such workshops are useful for women who want to pursue research in Science, Technology, Engineering and Mathematics (STEM). Further, higher education and research in Science & Technology (S&T) domain is strengthened in women only universities through development of state-of-the art facilities under CURIE (Consolidation of University Research for Innovation and Excellence) programme.

The Department agrees with the recommendations and appropriate interventions are being taken under KIRAN division to increase the employability of women researchers. One of the initiatives is to increase the number of industrial research projects for support so that women may also get a

chance to be absorbed in industry. Furthermore, Women Scientists Scheme is designed in such a way that based on performance, women scientists can continuously work till 60 years of age even if they do not get regular position. To further increase the employability of women scientists a new component – “Artificial Intelligence (AI) Facility” under CURIE program has been started. This new initiative expects to improve employability of around ten thousand girls studying in the universities.

The Department of Biotechnology (DBT) has the mandate of promoting women in science and science for women. With its vision to promote women in science and in an attempt to enhance the participation of Women Scientists in Biotechnology Research, DBT runs Biotechnology Career Advancement and Re-orientation Programme (BioCARE) for women scientists. The purpose of the scheme is to build capacities for women scientists employed fulltime in Universities and small research laboratories or unemployed women scientists after a career break so as to help them undertake independent R&D projects. Through this programme, DBT has been able to provide first independent R&D projects to 315 women scientists of India. Under this programme, consolidated emoluments are provided to unemployed women scientists in addition to the Research Grant. 28 women scientists have got permanent employment in various Institutions, Universities, Colleges and industries so far. These were unemployed at the time of getting their respective BioCARE projects. 250 Research Scholars are being supported under various projects funded under this scheme. More than 200 papers have been published. 11 patents have been filed. Young women scientists supported under the program are getting recognition and being invited to participate and present their work at National and International platforms.

The number of applications is increasing which indicates importance of the program and the impact it has created. The program will be continued and meritorious women scientists will be provided their first Independent projects.

During the year 2018-19, call was announced in seven areas of Biotechnology and 52 women scientists were selected for support.

During last five years, DBT has provided fellowship to 1685 women candidates under DBT-JRF/SRF Fellowship. Out of 3630 total candidates. Further, under the Biotech Industry Training Program Department has provided industrial training 2132 women candidates in last 5 years out of total 2984 candidates.

DBT organized -The 1st DBT-BioCARE Conclave with the theme “Women Scientists Achieving Great Heights” on 8th and 9th March, 2019 in New Delhi. Around 250 women scientists, students, experts and entrepreneurs from various states across India participated in the conclave. The major highlights of the conclave were various sessions where the beneficiaries of the scheme shared their success stories before and after getting their first independent BioCARE R&D projects and how it made an impact in their careers. In order to make women scientists aware of the various opportunities and schemes available in the country like Startup India, Biotechnology Ignition Grant (BIG) and other career options in science, a special session was organized where Women Entrepreneurs, Science Journalists, Science managers motivated them to make and continue career in science.”

Comments of the Committee

8. In response to the recommendation of the Committee regarding the need of integration of research with employability to engage women in R & D activities besides taking serious steps for increased motivation and financial empowerment, the committee note from the action taken reply of the Ministry of Science and Technology that ample steps have been taken to create employment opportunities for women researchers by way of various programs like KIRAN, STEM, CURIE by the Department of Science and Technology (DST) and programmes like Bio-CARe, DBT-JRF/SRF fellowship etc. by the Department of Biotechnology (DBT) and a sizable number of girl students have been provided with research opportunities coupled with employment. While appreciating the same, the Committee feel that there is a need for continuous efforts in this direction so that the total number of Women Researchers supported by the Ministry keeps growing. At the same time, the Committee, however, find that some of the basic essence of their recommendation like creating equality, cater to the backward districts and most affected areas and the need to conduct sensitisation workshops for greater awareness, financial freedom and empowerment of women have not been amply responded to by the Ministry. The reply of the Ministry of Science and Technology has not properly addressed these barriers which women face in carving out a niche in the field of research and development. The committee therefore desire that the Ministry take substantial measures to augment the total number of women in the various Research & Development Schemes and cater to the need of ameliorating the educational needs and pursuits of women who belong to the backward and underdeveloped regions of the country.

B. ACCESS TO HIGHER EDUCATION

[Recommendation Para No. 2(ii)]

9. "The Committee believe that education is an enlightening force and fosters the inner spirit of inquiry which is ennobling force, which is also a significant method of bringing back those sections of society which are beyond the social mainstream. The Committee believe that the Ministry should emphatically and at the earliest gather such data, analyze and work upon the findings to ensure that such aforesaid sections of the society are not left out. One of the methods, to engage the stake-holders is to develop a positive value system towards the existing system of governance and the percolation of benefits emanating out of Higher Education with the bruised social psyche of people living in such areas.

The Committee are glad to note about the efforts made by the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) as an overarching scheme, operated in mission mode for funding the state universities and colleges in order to achieve the aims of equity, access and excellence. The Committee have been informed that till date central assistance for creation of universities through a upgradation of Rama Devi Women Autonomous College, Bhubaneshwar and Jamshedpur Women's College into two universities has been approved by the project approval board (PAB) of RUSA. The Committee would recommend that the Ministry should actively persuade the various State Governments in opening up of various universities for equity, access and excellence and the number of universities opened should increase in a time bound manner.

The Committee are glad to note that there has been nomination of women in the IIT Council and a decision regarding increase of female enrolment in B.Tech programmes of IITs from the current 8% to 14% in 2018-19 to 17% in 2019-20 and 20% in 2020-21 by creating supernumerary seats in the

same manner as for the sanctioned seats which would lead to improvement of gender balance in IITs.

The Committee desire that the percentage of reservation for girls may be increased suitably to ensure that even in the face of any drop outs/ discontinuance, the annual pass out rate for women graduates increase substantially. The Committee feel that this would lead to greater representation of women in Research and Development at a later stage which would imbue a gender sensitive approach towards R&D activities.

The Committee are glad to note the effort taken by Indira Gandhi National Open University (IGNOU) in terms of their conscious efforts to reach out to women learners in remote and rural areas through special study centres for women which is 35 in number at present, establishment of the schools of gender and development studies in 2007 focusing upon achievement of gender justice and equity, creation of women and gender resource space and gender sensitization initiative having a multi-pronged spectrum of interventions including course/module/package design, development and delivery, research studies and skill development through gender training. The Committee recommend that the Ministry must actively implement efforts of this kind made by IGNOU in other distance-learning universities so that the every nook and corner of the country is reached with the enlightening forces of education and quest for women empowerment is able to achieve its cherished goals in tune with our constitutional aspirations. The Committee recommend that all the institutions under the Ministry of Science and Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of AYUSH work towards creating gender balance and intimate the Committee about efforts taken in the matter.”

10. The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“With reference to the recommendation that data should be gathered and analysed it is to be mentioned that, MHRD regularly conducts an all India Survey on Higher Education and publishes AISHE report. The recent AISHE report of 2017 provides a wide range of data regarding enrolment progression of women in higher education, gender parity, streams, etc. Such data is analyzed with gender perspective for formulation of new programmes.

A sizable section of women scientists remain away from mainstream science due to family responsibilities and take a break in career. Under the Women Scientists Scheme (WOS) of Department of Science and Technology (DST), opportunities for research are being provided to this group of women to bring them back into mainstream science.

Department of Science and Technology has started CURIE (Consolidation of University Research for Innovation and Excellence) programme in a top-down mode in order to provide better access of higher education to girls. Eight (8) women universities in the country have been provided support under CURIE Programme including the newly setup Rama Devi Women University, Bhubaneswar. Under this programme, support is given to strengthen the research infrastructure of Science, Technology, Engineering and Mathematics (STEM) departments in women universities.

During last five years, DBT has provided fellowship to 1685 (46.4%) women candidates under DBT-JRF/SRF Fellowship. Out of 3630 total candidates. Further, under the Biotech Industry

Training Program DBT has provided industrial training 2132 (71.4%) women candidates in last 5 years out of total 2984 candidates.

11. The Ministry of Human Resource Development in their action taken reply on the aforementioned recommendation stated as under:-

“Under the Centrally Sponsored Scheme of Rashtriya Uchchatar Shiksha Abhiyan (RUSA), State Governments are encouraged to address the issues of equity, access and quality of higher education by seeking central support under the scheme. Inter alia, central assistance is provided for creation of Universities either through upgradation of existing autonomous colleges or through clustering of colleges.

Till date, central assistance for creation of Universities through (i) Upgradation of Rama Devi Women’s Autonomous College, Odisha & Jamshedpur Women’s College, Jharkhand and (ii) creation of Maharani Cluster University, Bengaluru through Clustering of Colleges have been approved under RUSA. For each of these Universities, an amount of Rs. 55 crores has been approved under the scheme including both central and State share.

Furthermore, under the scheme, various other Women’s Universities have been supported under other components such as infrastructure Grants to Universities and Grants for Equity Initiatives.

With a view to improving female enrolment in the B.Tech Programmes in IITs, a Committee under the chairmanship of Director, IIT-Mandi was constituted by the Joint Admission Board (JAB) to suggest suitable measures. The recommendations of the Committee were considered by the IIT Council in its 51st meeting held on 28.04.2017 and decided to increase female enrolment from the current 8% to 14% in 2018-19, 17% in 2019-20 and 20% in 2020-21 by creating supernumerary

seats. Accordingly, IITs have created supernumerary posts for female enrolment for admission during 2018-19 and 2019-20. A copy of the extracts of the Joint Implementation Committee Report JEE (Advance) 2018 may be seen at <https://drive.google.com/file/d/12x1uG0BeGqO2r9OJi43Ag5YVAjF2alli/view>.

Based on the recommendation/ observation of the Committee, all the fourteen (14) State Open Universities (SOUs) have already been requested to take note of the desire of the Hon'ble Committee and arrange for taking similar steps as being taken by IGNOU to reach out to women learners in remote and rural areas.”

12. The Ministry of Health and Family Welfare are silent on the reply.
13. The Ministry of Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The Ministry of AYUSH through its five Research Councils and eleven (11) National Institutes has always encouraged gender balance. The data received from these institutions/councils provide a very bright picture as far as education of women is concerned. A summary of the report received from the Councils/ Institutes is as below:

- a) Institute for Post- graduate Teaching & Research in Ayurveda (IPGTRA) Jamnagar , has reported that during academic year 2018-19 out of 22 PhD scholars 12 (i.e. 54.54 %) are women & in post-graduation courses out of 48 students 33 (i.e. 68.75 %) are women.
- b) AllIA, New Delhi has reported that there are 75% female MD scholars in 1st year, 76.36 % female MD scholars in 2nd year and 71.43% female MD scholars in 3rd year.

- c) RAV, New Delhi has reported that more than 66% of the students are women.
- d) NIH Kolkata has reported that there are 58 % women candidates pursuing BHMS course out of total of 607 students. It has also enrolled 25 women candidates out of total 35 PG trainees this year which is 71 % approx.
- e) NEIAH, Shillong has admitted 78 female students out of 150 (52%) in BAMS course and 109 female students out of 150 (73%) in BHMS course.
- f) NIA, Jaipur has admitted 128 Female Post-Graduate Scholars out of 208 and 25 Female scholars in the Post-Doctoral course out of 56 during the last two years, which is 64% and 45% respectively.
- g) 05 female researchers of CCRH have pursued MD in Homoeopathy while employed.
- h) 03 female researchers of CCRUM have pursued MD / Ph.D while employed. Total of 38 women employees including Scientists are working in CCRUM that is 25.5 %.
- i) Out of total strength of 165 employees in CCRS, 75 are women employees. Of the total of 52 Scientist in CCRS, 32 are Women Scientists.”

Comments of the Committee

14. While observing the importance of gender equity in Higher Education, the Committee had desired that the Ministries of Science and Technology, Human Resources Development, Health and Family Welfare and Ayush should work towards creating gender balance in the various institutions which are working under them. The Ministry of Science and technology in their reply have stated that the Department of Bio-technology (DBT) during the last 5 years have provided fellowship to 1635 (46.4 percent) women candidates under the JRF/SRF fellowship program. Further, under the Biotech Industry Training Programme, DBT have provided industrial training to 2132 women candidates(70 1.4%) in the last 5 years. The Ministry of Human Resource Development (HRD) have

also stated that in order to improve female involvement in the B-Tech programmes in IITs, a committee under the chairmanship of Director, IIT-Mandi was constituted by Joint Admission Board (JAB) to suggest suitable measures and based on the recommendations of the said committee, the IIT Council in its 51st meeting had decided to increase female enrolment from current 8% to 14% in 2018-19 to 17% in 2019-20 and 20% in 2020-21 by creating supernumerary seats. Similarly, the Ministry of Ayush have stated that through its five Research Councils and 11 National Institutes gender balance has always been encouraged. The Committee are satisfied with the response of these three Ministries in terms of their efforts to maintain gender balance in educational institutions functioning under them. The Committee, however, note that the Ministry of Health and Family welfare have not furnished their action taken reply. The Committee, therefore, desire that the Ministry of Health and Family welfare may also inform the Committee about the steps taken or being taken by them to bring gender balance and ensure enhanced participation of female in research and development institutions working under them within three months of the date of presentation of this Report.

C. Woman Technology Park

[Recommendation No. 3]

15. “The Committee have been informed by Ministry of Science and Technology that more than 30 women technology parks have been supported in different parts of the country which provide one-step platform to address location specific or need based challenges faced by women through appropriate technologies. The Committee believe that Women Technology Park (WTP) set up with the help of government agencies would be a boon for the rural poor. Exposing women to latest technology and entrepreneurial ideas involving demonstration and dissemination of rural technologies related to weaving, metal art ware, banana fibre extraction, construction and habitat

services, agro and forest-based processing technologies can be a economic and social empowering measure catering to the dynamic needs of women empowerment, grand goal of our constitutional philosophy. The Committee recommend that more Women Technology Parks may be set-up in diversified sectors catering to regional needs and spread across the country to empower women and make them financially self sustainable. Demonstration of feasible projects and transfer of proven technologies to the society would improve the livelihood and quality of life of rural women by imparting necessary entrepreneurial skills. The Committee would desire that the Ministry of Science & Technology (DST&DBT) may work in tandem with the Skill Development Ministry and a multi-faceted approach may be developed to foster rural employment with self sufficiency and technological inclusion. The Committee recommend that in tune with the goals of the National Skill Development Programme of the Government of India there should be a larger integration of the goals and outcomes of the DST and Skill Development Ministry.”

16. The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“Currently thirty eight Women Technology Parks (WTP) were supported in various parts of the country. Out of the 38, 16 are ongoing and rest have been completed.

Exposing women to latest technology and entrepreneurial ideas involving demonstration and dissemination of rural technologies—A few examples:

Technology	Demonstration/Dissemination
Rural technology related to weaving	Revival of cotton weaving cluster Mangalgi through training for skill enhancement. Improved dyeing facilities, design development and zari

	<p>thread making facility.</p> <p>Training on Computer Aided Design (CAD) software for local craft design work to women artisans. Women Self Help Groups (SHGs) will be formed in Basani, Varanasi</p>
Banana fibre extraction	Banana fibre extraction from pseudo stems of banana at Women Technology Park, Annur Taluk, Coimbatore
Construction and habitat services	<p>Training programmes were arranged for vulnerable women in Tamil Nadu for generating income by promoting fly ash brick technology.</p> <p>Skill training in masonry, pre fab building elements and repairing house hold devices – fabrication of cement rings for tanks, slabs for covering drainage, tank covers, etc. was given at Women Technology Park in Wardha district, Maharashtra.</p>
Agro and forest-based processing technologies	<p>Value added products from areca nut seeds (Areca nut plates);</p> <p>Value added food products from tender mango leaves and tulsi.</p>
Other High end technologies	<p>ICT enabled technologies, skill enhancement training on food processing and preservation, craft designing and retail management.</p> <p>Training on operating CNC hot wire-cutter, training on</p>

	chocolate 3D printing machine, training on making granite bricks, awareness about e-waste recycling. etc
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Department of Science & Technology has initiated joint action with the National Skill Development Corporation (NSDC) to align various training programmes related to livelihood generation/income enhancement to National Skill Qualifications Framework (NSQF). The implementing agencies for the Women Technology Parks (WTPs) are advised to make proper framework, course curriculum of various trainings which are offered to the women beneficiaries through State Skill Development Council.

The Department of Biotechnology (DBT) supported Golden Jubilee Biotech Park for women, Chennai as an Mini Unique venture in Women Entrepreneur Development in the Biotech sector. Since its inception the Park has turned over 500 skill women Entrepreneurship, Technocrats and workers.

Biotechnology Industry Research Assistance Council (BIRAC), a Public Sector Undertaking of Department of Biotechnology has supported an incubator under Bio-Nest scheme at Sri Padmavati Mahilia Vidyalayam (Women's University) Tirupati, A.P. The incubator focuses on Women Entrepreneurship.

DBT has been supporting Biotechnology Based Programme for Women with the objective to promote the use of biotechnological processes and tools for the benefit of large number of women. The programme aims to create platform for self-employment generation among the target population through diffusion of proven and field-tested technologies by demonstration, training and

extension activities. The focus of the programme is also to promote health, hygiene and nutrition besides agriculture and allied areas. A number of projects have been supported on Cervical and Breast Cancer Screening, Genetic Counselling and pregnancy related complications in women. Several training modules were prepared for creating awareness on health, nutritional food preparations and agricultural practices. A large number of women have been benefitted through implication of biotechnology based programme on floriculture, horticulture, cultivation of mushrooms, medicinal and aromatic plants, bio-fertilizers, organic farming, vermicomposting, sericulture, aquaculture, animal husbandry including poultry farming.”

Comments of the Committee

17. The Committee are happy to note that the Ministry of Science and Technology by virtue of the Women Technology Parks (WTP) have taken a number of steps to involve women in various skill development programs enabling livelihood by the interface of technology and social support. The Committee are particularly glad to note the interface of technology in the field of weaving activities, banana fiber extraction, construction and habitat services, forest-based processing technologies and other high end technologies. The Committee find the efforts made by the Ministry of Science and Technology in coordination with the National Skill Development Corporation are commendable. The Committee at the same time feel that proper framework for development of course curriculum and various training methodologies is needed to be evolved to enable the rural women to make themselves conversant with the technology in Women Technology Parks. The Committee are glad to be informed by the Department of Biotechnology (DBT) that it had supported the Golden Jubilee Biotech Park for women which has since its inception turned over 500 skilled women entrepreneurs, technocrats and workers. While on one hand the Committee appreciate the efforts of the Ministry of Science and Technology in being a productive interface

between the empowerment of women with technology, on the other, the committee would like to remind the Ministry that the availability of technology to the illiterate and empowered women at the rural level is a cornerstone behind the recommendation of the committee in terms of the goals of the National Skill Development Program of the Government of India. In this context, the Committee while observing that that only 22 of a total of 38 Women Technology Parks have been completed, would like to reemphasize the essence of their recommendation that actual ground level efforts are needed to be enhanced to maximize the number of women getting benefits of the scheme. The Committee would also like the Ministry of Science and Technology to inform about the objective steps taken and the exact number of women empowered by virtue of technology parks in the Final Action Taken Statement.

D. Science & Technology Policy - 2013: the prospects for women

[Recommendation No. 6]

18. “The Committee note that attracting talented and bright minds towards careers in science, research and innovation is one of the main objectives of the STI Policy -2013. This policy includes Innovation for inclusive growth implying ensuring access, availability and affordability of solutions to as large a population as possible, Establishing world class infrastructure for R&D for gaining global leadership in some select frontier areas of science, positioning India among the top five global scientific powers by 2020, linking contributions of science, research and innovation system with the inclusive economic growth agenda and combining priorities of excellence and relevance, creating an environment for enhanced Private Sector Participation in R&D, Enabling conversion of R&D outputs into societal and commercial applications by replicating hitherto successful models as well

as establishing of new PPP structures, triggering changes in the mindset and value systems to recognize, respect and reward performances which create wealth from S&T derived knowledge.

The Committee believe that the goals are laudable and a good roadmap for developing the country as a scientific power is essential so that bright minds are attracted towards science and technology. Vacancy data in various organizations as suggested by the Ministry about their own initiatives are not very encouraging. Therefore the Committee recommend the Ministry to ensure better Industry interface, which is required so that number of unemployed persons are reduced. Further, the schemes under a single umbrella scheme-KIRAN- 2014, Women Scientist Scheme-A (WOS-A) for basic and applied research in five streams may be reviewed and broadened so that a greater number of Researchers are included in the scheme. The Committee desire that the Ministry of Science & Technology and Ministry of Human Resources Development intimate about the action taken in the matter at the earliest.”

19. The Ministry Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“The Department agrees with the recommendations and the review process of Women Scientist Scheme-A (WOS-A) has been initiated with an objective to broaden the horizon and improve the employability of women with inclusion of new domain of industrial R & D.

Ever since its inception, the Fund for Improvement of S&T Infrastructure (FIST) Program under the R&D Infrastructure Division, DST has provided sustainable funding over last eighteen years that has made deep impact in many departments/ PG Colleges across the country in carrying out advanced research in contemporary areas of science and technology and also set-up modern teaching facilities. FIST Program has been instrumental in establishing state-of-the-art facilities for

performing high end research and has thus benefited academicians and researchers across the country.

The realm of the FIST Program has engendered many prestigious Women's PG Colleges across the country covering most states. Some of these prestigious colleges include Sophia College for Women, Mumbai; Hans Raj Mahila Maha Vidyalaya, Jalandhar; Raja Narendralal Khan Women's College, Midnapore; Lady Brabourne College, Kolkata; Lady Doak College, Madurai; Maharani Lakshmi Ammanni College for Women, Bengaluru, Bethune College, Kolkata; Government College for Women, Thiruvananthapuram; Holy Cross College, Kanyakumari; Loyola College, Chennai; Shri Vishnu Engineering College for Women, Bhimavaram; Justice Basheer Ahmed Sayeed College for Women, Chennai; Mercy College, Palakkad; Post-Graduate Government College for Girls, Chandigarh; Sri Satya Sai College for Women, Bhopal; Mahant Darshan Das Mahila College, Muzaffarpur etc.

Currently, a total of Rs 38.78 crores (approximate) have been invested in about 52 Women's PG Colleges under the FIST Program. The year wise details since the year 2009-2010, are provided in Table below:

Table 1

S. No.	Financial Year	No. of Women's PG College supported	Total amount (Rs in lakh)	Average support (Rs in lakh)
(1)	(2)	(3)	(4)	(5)
1	2009-10	02	71.50	35.8
2	2010-11	05	299.0	59.8
3	2011-12	04	330.0	82.5
4	2012-13	03	206.0	68.7
5	2013-14	08	658.0	82.2
6	2014-15	05	380.0	76
7	2015-16	10	663.0	66.3
8	2016-17	04	395.0	98.8
9	2017-18	07	585.0	83.6
10	2018-19	04	290.0	72.5
Total:		52	3, 877.50	74.6

Over the years, some well-known Women's Universities have also been the recipients of DST FIST support. The details of the support provided to these Universities are provided at Table 2 below:

Table 2

University	Department	Sanctioned Amount (Rs in lakh)
(1)	(2)	(3)
Sri Padmavati Mahila Visvavidyalayam, Tirupati, Andhra Pradesh	<u>FIST 2008</u> ♦ Applied Microbiology	33.0
	<u>FIST 2014</u> ♦ Institute of Pharmaceutical Technology	58.0
	<u>FIST 2016</u> ♦ Sericulture	49.0
Mother Teresa Women's University, Kodaikanal, Tamil Nadu Banasthali Vidyapith, Banasthali, Rajasthan	<u>FIST 2014</u> ♦ Biotechnology	50.0
	<u>FIST 2004</u> Chemistry	22.0
	<u>FIST 2008</u> Bioscience	67.0
	<u>FIST 2015</u> Bioscience & Biotechnology	165.0
	Total:	444.0

Under BioCARE Scheme Department of Biotechnology (DBT) has been able to provide first independent R &D projects to 315 women scientists of India. Under this programme, consolidated emoluments are provided to unemployed women scientists in addition to the Research Grant. 28 women scientists have got permanent employment in various Institutions, Universities, Colleges and industries so far.”

20. The Ministry of Human Resource Development are silent on the reply.

Comments of the Committee

21. The Committee in their original recommendation highlighted the main objective of the Science and Technology Policy 2013 which included innovation for inclusive growth, access, availability, affordability of technological solutions to a large population as much as possible

establishing world-class infrastructure for Research and Development for gaining global leadership of our country in selected areas of science positioning India among the global scientific powers by 2020 etc.. The Committee had also highlighted the need to enhance private sector participation, conversion of Research and Development output into societal and commercial applications by replicating successful models. The Committee are glad to note that in response to the recommendation of the Committee, the Ministry of Science and technology have mentioned that a review process of Women Scientist Scheme has been initiated with an objective to broaden the horizon and improve the employability of women with inclusion of new domain of industrial R&D. The Committee are also happy to note that the Fund for Improvement of Science and Technology Infrastructure(FIST) program has provided sustainable funding for the last 18 years making deep impact upon advanced research in contemporary areas of Science and Technology. The Committee, however, note that the Ministry of Human Resources Development have not furnished any reply to the recommendation of the Committee. Keeping in view the significance of innovation, inclusion, availability and affordability of resources in creating prospects for women in the field of Science and technology, the Committee desire the Ministry of Human Resource Development must also furnish their response to the recommendation of the Committee within three months of the presentation of this Report..

E. Representation of Women in Research Organisations

(Recommendation No. 7)

22. “The Committee note that out of a total strength of 12342 employees in CSIR only 2148 are women. Of the total of 3513 scientists in the CSIR, 645 are women scientists as of December 2017. The Committee believe that it is matter of concern that only 17.40 percent of the total employees are women, and only 18.36 per cent of the total scientists are women. Gender equality

in research has a vibrant impact on the redressal of women centric needs and ensuring motivation of the women in Research and Development. In order to ensure this the Committee recommend the Ministry to set up a committee to enquire into the reasons of lop sided growth and taking appropriate measures for engaging of women scientists in the research establishment in the country. The Committee believe that many of the women who pursue post-graduate academic course in science stream do not end up in R&D or in education sector due to many social and family obligations. This needs to be addressed by a flexible approach. The Committee recommend that the Ministry conduct studies/surveys relating to the issue of low representation of women in various research establishments of the country to address them in a time bound manner about the efforts taken to tackle the issue of under representation of women in research and scientific establishments under the Ministries of Science and Technology and Human Resources Development.”

23. The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“The Ministry has conducted various studies and it was found that 17% of the working strengths in the Autonomous Institutions are women. DST is exploring the possibilities to encourage women scientists to apply for various positions in different research establishments.

The Ministry/Department and Council of Scientific and Industrial Research (CSIR) shares the concern of the Committee that as of December 2017, only 17.40 % of the total employees in CSIR are women and only 18.36 % of the total scientists employed in CSIR are women.

CSIR has taken several policy measures such as: (i) providing more R&D opportunities to women scientists so as to expose them to next generation technologies; (ii) encouraging them to take up leadership position; and (iii) training women scientists and technologists to acquire entrepreneurial skills to motivate the women towards R&D and to enhance their engagement in its research establishments.

An Empowered Committee 'Standing Committee for Promotion of Women in Science' has been constituted by Department of Science and Technology in the year 2016 to enquire into the lopsided growth of women in R&D. Representatives of CSIR are being invited to the meetings of the Committee.

In 15 DBT Autonomous Institutions the total sanctioned scientist position is 573 and on roll position is 315. The total number of women scientists working in these institutions is 84. DBT Autonomous Institutions have been taking numerous measures for promoting women scientists.”

24. The Ministry of Human Resource Development are silent on the reply.

Comments of the Committee

- 25. Realizing the need for gender equality and greater representation of women in R&D sector, the Committee had recommended to set up a Committee/ conduct studies, surveys to enquire into the reasons of lopsided growth and engaging of more women in research establishments in the country. The Committee are happy to note about the efforts of the Ministry of Science and Technology in exploring possibilities to encourage women scientists to apply for various positions in different research establishments. The Committee also applaud the efforts of CSIR in taking**

several policy measures for motivating women towards R&D. The Committee, however, note that the Ministry of Human Resources Development are silent on the recommendation. The Committee, therefore, desire that the Ministry of Human Resources Development inform the Committee in the context of the recommendation made in the report for fostering gender equality and enhancing greater representation of women in Research establishments under their domain in the Final Action Taken Statement.

F. Scholarships/aids/facilities for women

[Recommendation No. 8]

26. “The Committee are glad to note that various central sector schemes of scholarship for college and university students, Pragati Scholarship Scheme, Post-doctoral Fellowship to Women Candidates, Post-Graduate Indira Gandhi Scholarship Scheme for Single Girl Child, Swami Vivekanand Single Girl Child fellowship for research in social sciences etc. The Committee were informed that for the unemployed women holding P.hD degrees and intending to pursue post-doctoral research on full-time basis, the UGC has been providing 100 fellowships per annum with the fellowship amount of Rs. 38000 per month for fresh candidates and Rs. 46500 per month after 2 years and contingency amount of Rs. 50000 for 5 years. It was also informed that the total number of slots available under the Dr. S. Radhakrishnan Post-doctoral Fellowship for Women in Humanities and Social Sciences is 200 per year. Further, the Committee are glad to note that the UGC has introduced Swami Vivekanand Single Girl Child Fellowship for research in Social Sciences during 2014-15 and 121 candidates were selected during the reporting year. The Committee also desire that in order to ensure that there is a wide presence of women, greater financial support is required so that

creative capacities of women are manifested in the research arena. The Committee recommend that the number of slots for scholarships under all the above schemes should be increased suitably by the Ministry of Human Resources Development. The Committee desire that the Ministry inform about the action taken in the matter regarding increase in the number of scholarships under various schemes of the UGC and the Central Government.”

27. The Ministry of Human Resource Development in their action taken reply on the aforementioned recommendation stated as under:-

“The scheme of ‘Swami Vivekananda Single Girl Child Fellowship for Research in Social Sciences’ was started in 2014-15 to encourage women to pursue Ph.D. in Social Sciences including Humanities and Languages. Since the number of slots has not been limited/fixed, all the applicants, who are found eligible, are given fellowship to pursue research leading to award to Ph.D. For the selection year 2018-19, UGC has awarded the fellowship to 269 women. Further, to cover more women scholars, UGC has decided to extend the ambit of this scheme for all the streams, beginning 2019-20.

The scheme namely ‘P.G. Indira Gandhi Scholarship for Single Girl Child’ is in inception since 2006-07 and envisaged to provide financial assistance to selected candidates being Single Girl Child for pursuing Post-graduation on full time/regular basis in Higher Educational Institutions in India. Since this is also an incentive scheme, there is no cap on the number of selections. Therefore, all the eligible applicants receive scholarship under this scheme. For the selection year 2018-19, UGC has selected 2445 girls under the scheme.

In view of the recommendations of the Committee, UGC has already initiated the process of revision of guidelines of various scholarship/fellowship schemes including (i) Post Doctoral Fellowship for Women Candidates (ii) Swami Vivekananda Single Girl Child Fellowship for Research in Social Sciences (iii) P.G. Indira Gandhi Scholarship for Single Girl Child'. It is contemplated to increase the slots to increase the participation of women in higher studies."

Comments of the Committee

28. Having realized the need for financial support to enhance creative capacities of women in the arena of research, the Committee in their original Report had recommended for increasing the number of slots for scholarships under the various central sector schemes under the Ministry of Human Resource Development. The Committee are glad to note that the University Grants Commission (UGC) in pursuance of their recommendation has initiated the process of revision of guidelines of various scholarships and fellowship schemes including Post Doctoral Fellowship for Women Candidates, Swami Vivekananda Single Girl Child Scholarship for Research in Social Science and PG Indira Gandhi Scholarship for Single Girl Child. Moreover, it is also being contemplated to increase the slots to increase the participation of women in higher studies. In this context, the Committee desire that objective steps taken to enhance the number of slots for scholarship by the Ministry of Human Resources Development along with the real outcomes be communicated to the Committee in the Final Action Taken Statement.

G. Participation of Women in R&D relating to Health and Family Welfare

[Recommendation No. 9(ii)]

29. “The Committee desired to know from the Ministry of Health and Family Welfare regarding details of female researchers to the total researchers and efforts to provide support for involvement for women in the field of medical research. However, the Committee note that no such central and country-wide data has been compiled by the Department of Health or Indian Council of Medical Research (ICMR) since a large number of scientists including women scientists are engaged in the Bio-medical research at various medical colleges, research institutes through their internal funding or grants from several agencies/organizations. The Committee believe that in an age of information revolution, various database of empowerment, inclusion and equity is the cornerstone for effective formulation of policies for widening the participation of women in the development of the country. The Committee recommend that a centralized data be created by the Ministry of Health regarding involvement of female researchers in the field of medical sciences and research.

The Committee note that in the National Institute of Epidemiology, Chennai only three women scientists are present out a total number of 18 scientists, the number for National Institute of Medical Statistics, Delhi is 3 out of 16, 0 out of 5 in National Animal Resource Facility for Bio-medical research, Hyderabad, 1 out of 21 in National Institute for Research in Tribal Health, Jabalpur, 0 out of 15 in Rajendra Memorial Research Institute of Medical Sciences, Patna, 0 out of 6 in Regional Medical Research Centre, Port Blair, 3 out of 16 in National Jalma Institute of Leprosy and other Myco-Bacterial diseases (NJILMOD) Agra. Further, the total percentage of women scientists in ICMR Institutes is 33%. The Committee are further appalled to note that the information furnished by ICMR institutes regarding women researchers speaks of under-representation of women in various institutes. The Committee recommend that a detailed policy should be framed and implemented in a manner so that the regional disparity and under-

representation of women in the field of Research and Development is taken care of. In States where the socio-cultural barriers are against the involvement of women in higher education, research and development, more focus should be given so that the cultural norms which act against participation of women in higher education, research and development should be addressed and women break free from the shackles of stereotypes and prejudices which work against them. The Committee further recommend to the Ministry of Health and Family Welfare to find feasibility of appointment of women researchers in under represented and backward regions so that they become change agents and create a climate of participation and inclusion in the field of higher education research and development so that the grand constitutional vision of women empowerment is achieved.”

30. The Ministry of Health and Family Welfare in their action taken reply on the aforementioned recommendation stated as under:-

“The Department of Health Research has obtained data from D/o Science & Technology, D/o Biotechnology, Indian Council of Medical Research and various schemes of the Department. This data is being processed and final action taken reply will be submitted shortly.”

“A detailed policy on regional disparity and under-representation of women does not exist presently in r/o ICMR/DHR. This is also because research projects are awarded on the basis of scientific soundness and merits of the research proposal. However, this will be taken care of as a future strategy.”

Comments of the Committee

31. Believing that in an age of information revolution, various database of empowerment of women, inclusion and equity is the cornerstone for effective formulation of policies for widening the participation of women in the development of the country, the Committee in their original Report recommended that a centralized data be created by the Ministry of Health and Family Welfare in respect of involvement of female researchers in the field of medical sciences and research. In the same recommendation, the Committee while observing the under-representation of women researchers in ICMR institutes, recommended that a detailed policy should be framed and implemented in a manner so that the regional disparity and under-representation of women in the field of Research and Development is taken care of. From the action taken reply of the Ministry of Health and Family Welfare, Department of Health, the Committee note that in pursuance of their recommendation, the Department of Health Research has obtained data from the Ministry of Science and Technology, Department of Biotechnology and Indian Council of Medical Research. According to the Ministry, this data is still being processed. Keeping in view that no tangible reply has been furnished by the Ministry, the Committee would like to be apprised of the objective efforts and outcomes on the recommendation made by the Committee regarding participation of Women R&D in the Final Action Taken Statement.

F. Achievement in Research and Development relating to Women's Health and scope for further prospects for Women in R & D relating to Health.

[Recommendation No. 10 (ii)]

32. "The Committee note that cancer incidents among women in India is estimated to increase from 110 per 1 lakh population to 190-260 per 1 lakh population by 2025. Across States there is a

deterioration of key risk factors that contribute to cancer incidents among women and India is witnessing significantly adverse mortality rates for women specific cancers with cervical and breast cancer mortality rates being 1.6 to 1.7 times higher than mortality due to maternal causes. The challenge of high incidence is further compounded by late detection which has an adverse impact on cost of care and mortality. The Committee are happy to hear from the Ministry that screening through adoption of established screening methods for cervical and oral cancers is being done. The Committee are glad to note about the path breaking research findings in new devices for detection of breast lumps in early stages and visual device with a light source (AV Maganivisualizer) for easy and better visualization of the uterine cervix as well as the oral cavity be put to commercial production so that it is utilized and health concerns of the maximum female population of the country can be taken care of. The Committee note that the states of Delhi and Punjab have been pioneers in rolling out of Human Pappiloma Virus (HPV) Vaccination. The Committee recommend for replicating the efforts of the States of Delhi and Punjab in rolling out of the HPV Vaccination Programme for girls aged 9 to 13 years in all other States as well. The Committee further recommend that the Ministry of Health and Family Welfare must collaborate with other State governments for effective implementation of this vaccination programme.”

33. The Ministry of Health and Family Welfare are silent on reply.

Comments of the Committee

34. The Committee had noted the likelihood of cancer incidents among women in India to increase and deterioration of key risk factors resulting in significantly adverse mortality rates for women specific cancers. In this context, the Committee observed that the states of Delhi and Punjab have been pioneers in rolling out of Human Pappiloma Virus (HPV) Vaccination. The Committee had thus recommended for replicating the efforts of the States of Delhi and Punjab in

rolling out of the HPV Vaccination Programme for girls aged 9 to 13 years in all other States as well and had desired that the Ministry of Health and Family Welfare must collaborate with other State governments for effective implementation of this vaccination programme. The Committee express their dismay that no reply has been received about the efforts taken by the Ministry in this regards. Therefore, the Committee desire that the Ministry of Health and Family Welfare inform the Committee objectively about action taken on the issue in their Final Action Taken Statements.

I. Budgetary Issues

[Recommendation No. 11]

35. "The Committee note that all the projects sanctioned by the Ministry of Science and Technology are evaluated by an Expert Committee of Scientists and the said Committee monitors outcomes of the projects based on Annual Reports as well as completion reports whenever available.

The Committee further note that all the existing R&D Schemes were evaluated for their effectiveness, delivery and outcomes vis-a-vis objectives last year and based on the evaluations, schemes have been revised taking into account suggestions of experts as well as other stakeholders. The Committee believe that Research Project Evaluation Criteria are seminal for the achievement of outcomes of Research and Development.

The Committee are further glad to be informed from the Ministry of Human Resources Development that the Department of School Education & Literacy has 100 % women – specific scheme viz. National scheme for incentive to Girl child for Secondary Education for which the budget allocation in F.Y. 2018-19 is Rs. 255.90 Crore. Similarly, the Department of Higher Education has also 100% women- specific scheme viz. Prime Minister's Girls' Hostel for which the

budget allocation in F.Y. 2018-19 is Rs. 30.00 Crore. Further, the Committee note that there are other schemes which are under 30% Women specific programmes. The Committee recommend that the composition of such schemes should be strengthened further to augment capacity building in women for furthering Research and development activities.

While appreciating that the actual expenditure of the Department of Health Research including Indian Council of Medical Research (ICMR) has been consistently growing for the last 10 years, the Committee are disheartened to note that the allocation of budget on health research works out to be 2.3 per cent only, *i.e.*, allocation of Rs. 1800 crore out of the total allocation of Rs. 77,069 crores for the Ministry of Health and Family Welfare. As such, the Committee recommend that allocation on health research may suitably be enhanced so that the R&D on health sector do not suffer for want of money thereby furthering the prospects of women participation in Research and Development activities of Health and Family Welfare.

The Committee note under Ministry of AYUSH that there is a wide gap between grants given to Central Council for research in Ayurvedic Sciences (1678.39 crores) and Central Council for Research in Yoga and Naturopathy (192.22 crores). Further the grants for National Institutes in North-Eastern Regions like North-Eastern Institute of Ayurveda and Homeopathy, Shillong and North-Eastern Institute of AYUSH/Folk medicine, Pasighat is very low *i.e.*, Rs. 82.38 crores and Rs.34.17 crores respectively. The Committee believe that the financial and psycho-social burden of diseases in the country can be tackled by a holistic approach to integrate research practices of various healing systems. Further, the Committee recommend that in the context of budgetary allocations, the issue of uniform regional development and access to healthcare should be given

prime consideration. The Committee recommend that the Ministry of AYUSH take up the issue of increased allocation of budgetary resources for Health Research with Ministry of Finance.”

36. The Ministry of the Health and Family Welfare in their action taken reply on the aforementioned recommendation stated as under:-

“Budgetary demand is submitted on need basis. Budget allocation for the current year 2019-2020 is Rs. 1950 crore against Department’s projected requirement of Rs. 2654 crore. This is against the net budget allocation of Rs. 62659 crore (gross Rs. 93035 cr.) of the M/o Health and Family Welfare, Thus, the allocation for DHR including ICMR comes to about 3%. Efforts will be made to maximize research activities/proposals for presentation of budget demand for inclusion in the budget of M/o Health and Family Welfare thereby furthering the prospects for women participation in Research and Development activities of Health and Family Welfare.”

37. The Ministry of the Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The funds allocated during the last five years to Central Council for Research in Ayurvedic sciences (CCRAS), Central Council for Research in Yoga and Naturopathy (CCRYN), North-Eastern Institute of Ayurveda and Homeopathy (NEIA&H), Shillong and North-Eastern Institute of AYUSH/ Folk Medicine (NEIFM), Pasighat are as detailed below:

Year	CCRAS	CCRYN	NEIA&H, Shillong	NEIFM, Pasighat
2014-15	129.07	15.94	24.00	13.50
2015-16	144.00	15.24	14.00	6.40
2016-17	170.00	30.00	9.00	6.00

2017-18	175.00	32.00	10.00	10.00
2018-19	252.91	29.00	18.00	10.00
Total	871.68	122.18	75.00	45.90

The funds are allocated to the Councils/Institutes on the basis of the budgetary allocation made by the Ministry of Finance and on the basis of the requirement of the concerned Council/Institute.”

Comments of the Committee

38. The Committee in their original Report while appreciating that the actual expenditure of the Department of Health Research including Indian Council of Medical Research (ICMR) has been consistently growing for the last 10 years, were disheartened to note about the low allocation of budget on Health Research. As such, the Committee recommended that allocation on Health Research may suitably be enhanced so that the R&D on health sector do not suffer for want of money thereby furthering the prospects of women participation in Research and Development activities of the Ministry of Health and Family Welfare. The Ministry of Health and Family Welfare in their reply have stated that the allocation for Department of Health Research (DHR) including ICMR comes to about 3 % of allocated funds while assuring that efforts will be made to maximize research activities/proposals for presentation of budget demand for inclusion in the budget. As regards the recommendation of the Committee for the Ministry of Ayush to take up the issue of increased allocation of budgetary resources for health research with the Ministry of Finance, the Committee feel dismayed at their lacklustre reply simply stating that funds are allocated on the basis of requirement of the concerned Council/ Institute. The Committee, therefore, while reiterating their recommendation for the Ministry of Ayush, desire the Ministry of Health and Family Welfare to intimate the Committee about the objective outcomes of the efforts made by them, in their Final Action Taken Statement.

J. Miscellaneous issues : Need for strengthening the prospects of Women researchers with special needs:

[Recommendation No. 12 (i)]

39. “The Committee note that the initiatives are needed to ensure that women researchers with special needs are encouraged and their creative capabilities harnessed in the research and development sector. The Committee note that no specific programmes for women researchers with special needs has been created. The Committee further desired to know about the best international practices with respect to women researchers with special needs to be suitably incorporated in the KIRAN programme. The Committee are surprised to note that in an age of growing movement towards equality and exercise of compassion towards the weaker and the vulnerable sections of the society, the Ministry is lacking in an emphatic approach towards these sections of society. Moreover, in the backdrop of the fact that global interconnectedness and emulation of the best international practices to involve women facing vulnerability and have opportunity to manifest the creative potential in the women , the Committee firmly recommend that in all the future Research Opportunity, women with special needs must be duly considered and empowerment of women by the creative and potent tool of Research and Development be bolstered to create an enabling environment for every kind of women to involve in the Research and Development opportunities. The Committee also recommend that the Ministry of Science and Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of AYUSH conduct a nationwide survey based on international benchmarks to ascertain the presence of a disabled friendly environment in research establishments under their jurisdiction. The Committee would like to be apprised of the action taken in the matter by all the ministries at the earliest.”

40. The Ministry Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“DST has already implemented the government policy for facilitating a differently abled friendly environment in all its autonomous scientific establishments.

The Department appreciates the suggestion of encouraging participation of women researchers with special needs. DST is sensitive to needs of women researcher with special need. However, DST being a funding agency can at best ensure that women with special needs are duly considered in the scheme as their actual place of work is generally universities or laboratories.

Department of Biotechnology (DBT) is implementing Biotechnology Career Advancement and Re-orientation Programme (BioCARE) for women scientists. The purpose of the scheme is to build capacities for women scientists employed fulltime in Universities and small research laboratories or unemployed women scientists after a career break so as to help them undertake independent R&D projects.

DBT autonomous institutions have been following the guidelines led down by Government of India in providing equal opportunities and facilitating women with special need. The institutions have taken several steps to facilitate women with special need viz. establishment of crèche / day care facility installation of lift, disabled friendly toilet, ramp with handrails etc.”

41. The Ministry of Human Resource Development are Silent on the reply.

42. The Ministry of Health and Family Welfare in their taken reply on the aforementioned recommendation stated as under:-

“As informed in reply to para 9 (ii), the research projects are awarded on the basis of scientific soundness and merits of the research proposal and the women with special needs are given equal opportunity. However, ICMR has informed that it would give further impetus to engage them in future in consultation with M/o Social Justice & Empowerment.”

43. The Ministry of Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The M/o AYUSH appreciates that special provisions are required for women researchers with special needs for which it is making the buildings of research institute/units and national institutes disabled friendly. The following actions have been taken in the research councils and national institutes:-

- a) The buildings of CCRH Headquarters and its institutes/units in Noida, Gudivada, Agartala, Kolkata, Hyderabad, Tirupati, Ranchi, Patna and Puducherry are now disabled friendly.
- b) The buildings of CCRUM Headquarters and its institutes/units in Hyderabad, Lucknow, Chennai, Patna, and Bhadrak are now disabled friendly.
- c) NIN Pune in its upcoming extension of NISARG GRAM project has made special provision for women researchers with special need.
- d) In AIIA, the establishment of Crèche/Day care facility is under progress.
- e) NIH Kolkata is striving for disabled friendly environment having lifts, ramps, washrooms etc.”

Comments of the Committee

44. The Committee in their original Report while observing that no specific programs for women researchers with special needs have been created, impressed upon the Ministry of Health and Family Welfare, Ministry of Science and technology, Ministry of Ayush and the Ministry of Human Resource Development to ensure that women researchers with special needs are encouraged and their creative capabilities harnessed in the research and development sector. The Committee, therefore, firmly recommended for creation of an enabling environment for involving them in the Research and Development opportunities besides conducting a nationwide survey based on international benchmarks to ascertain the presence of a disabled friendly environment in research establishments under their jurisdiction. The Committee note from the action taken reply of the Ministry of Science and Technology that the Department of Science and Technology (DST) as well as the Department of Bio technology (DBT) have already implemented /following the government policy for providing equal opportunities and facilitating women with special needs in all its autonomous scientific research establishments. In addition, several steps like establishment of crèche, day care facility, installation of lift, disabled friendly toilet, ramp with handrails etc., have been taken for women with special needs. Similarly the Ministry of Health and Family Welfare have stated in their reply that women with Special needs are given equal opportunity and the Committee are glad to be informed that Indian Council of Medical Research(ICMR) would give further impetus to engage the women with special needs in future in consultation with M/O Social Justice and Empowerment. The Committee also appreciate the efforts of the Ministry of AYUSH that special provisions have been made for women researchers with special needs by making buildings of research institutes/units and national institutes disabled friendly. At the same time, the Committee are perturbed to find that the Ministry of Human Resource Development in their action taken

replies to the extant Report of the Committee have chosen to remain silent on this recommendation of the Committee. The Committee therefore desire that the Ministry of Human Resources Development must inform the Committee about steps taken by them in this regard in the Final Action Taken Statement.

CHAPTER II

OBSERVATION/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

RECOMMENDATION (Para No. 2(i))

Access to Research and Development

“The Committee believe that equality, inclusion and access are the three pillars which uphold the spirit of education and bridge the gulf between the haves and the have-nots and create an inclusive society. The Committee are happy to note that the Ministry of Science and Technology have ensured that a sizable number of women belonging to BPL/Backward districts/Rural districts/Terrorist and Maoist Infected Area are getting benefit from “science and technology for women” programme. The Committee are further glad to note that women get training of various techniques and processes for income generation which enhance their livelihood. Further, the women scientists scheme of KIRAN (Knowledge Involvement in Research Advancement through Nurturing) has been able to cater to the needs of a significant number of women belonging to backward and terrorism and maoist infested areas, is a positive and significant fact to take note of.

The Committee find that the reply of the Ministry of Science and Technology with regard to the issue of Equality, Inclusion and Access related challenges in imparting education in the secondary level and this initial handicap is linked with the issue of women participation in higher Education, Research and Development in the country and the context of the regional diversities with respect to women’s participation in higher Education, Research and Development has not been replied. The Committee are of the view that being gender neutral would only serve the purpose when there is equality in status and opportunities in terms of financial, social, cultural and educational barriers. Women being a weaker section of the society suffer from the various stereotypes and prejudices which requires an extra effort guided by compassion,

empathy and toleration to ensure their equal participation in R&D activities. In its efforts to ensure equality, inclusion and access, the Committee appreciate the fact that the Ministry conducts 'Sensitization' workshops to create awareness among women about various women-specific programmes and also to motivate them to apply under appropriate programmes to get support for research as well as other S&T based activities. DST facilitates travel of aspirant women to attend the Expert Committee Meetings and selected Women get fellowships and/or research project grant based on their qualifications and experience. These practices give the beneficiaries financial freedom and minimize financial burden of family on women's higher education. DST has also initiated Vigyan Jyoti programme which entails counseling of the family members (parents) of the girl child.

The Committee note that efforts in engaging women in research and development is laudable but lack of employment opportunities continue to dampen the spirit towards research and development. Further, the involvement of Civil society and NGOs would help in community sensitization and breaking the social prejudices towards women and create positive attitudes towards R&D. The Committee strongly recommend that in view of the demographic dividend which India continues to enjoy, the integration of Research with employability will be the much needed thrust to engage women in Research and Development activity.

The Committee note that more than 4000 women got financial support under 3 components of women scientists scheme (WOS-A,B and C) and that almost one-third of the women in WOS scheme have regular jobs. The Committee recommend that serious steps be taken to ensure that employability of researchers should be increased to ensure motivation, financial empowerment etc."

Reply of the Ministry of Science and Technology

“The Department has been sensitive to regional diversities with respect to women participation in research and development. The available data of women scientists is critically analyzed and location based interventions are being carried out. Sensitisation workshops are conducted in the areas where women participation is low. Under these workshops, women scientists are not only provided information about Knowledge Involvement in Research Advancement through Nurturing (KIRAN) fellowship programmes but are also exposed to relevant thematic research areas which are more suitable to that particular location by experts. Such workshops are useful for women who want to pursue research in Science, Technology, Engineering and Mathematics (STEM). Further, higher education and research in Science & Technology (S&T) domain is strengthened in women only universities through development of state-of-the art facilities under CURIE (Consolidation of University Research for Innovation and Excellence) programme.

The Department agrees with the recommendations and appropriate interventions are being taken under KIRAN division to increase the employability of women researchers. One of the initiatives is to increase the number of industrial research projects for support so that women may also get a chance to be absorbed in industry. Furthermore, Women Scientists Scheme is designed in such a way that based on performance, women scientists can continuously work till 60 years of age even if they do not get regular position. To further increase the employability of women scientists a new component – “Artificial Intelligence (AI) Facility” under CURIE program has been started. This new initiative expects to improve employability of around ten thousand girls studying in the universities.

The Department of Biotechnology (DBT) has the mandate of promoting women in science and science for women. With its vision to promote women in science and in an attempt to enhance the participation of Women Scientists in Biotechnology Research, DBT runs Biotechnology Career Advancement and Re-orientation Programme (BioCARE) for women scientists. The purpose of the scheme is to build capacities for women scientists employed fulltime in Universities and small research laboratories or unemployed women scientists after a career break so as to help them undertake independent R&D projects. Through this programme, DBT has been able to provide first independent R&D projects to 315 women scientists of India. Under this programme, consolidated emoluments are provided to unemployed women scientists in addition to the Research Grant. 28 women scientists have got permanent employment in various Institutions, Universities, Colleges and industries so far. These were unemployed at the time of getting their respective BioCARE projects. 250 Research Scholars are being supported under various projects funded under this scheme. More than 200 papers have been published. 11 patents have been filed. Young women scientists supported under the program are getting recognition and being invited to participate and present their work at National and International platforms.

The number of applications is increasing which indicates importance of the program and the impact it has created. The program will be continued and meritorious women scientists will be provided their first Independent projects.

During the year 2018-19, call was announced in seven areas of Biotechnology and 52 women scientists were selected for support.

During last five years, DBT has provided fellowship to 1685 women candidates under DBT-JRF/SRF Fellowship. Out of 3630 total candidates. Further, under the Biotech Industry Training Program Department has provided industrial training 2132 women candidates in last 5 years out of total 2984 candidates.

DBT organized -The 1st DBT-BioCARE Conclave with the theme “Women Scientists Achieving Great Heights” on 8th and 9th March, 2019 in New Delhi. Around 250 women scientists, students, experts and entrepreneurs from various states across India participated in the conclave. The major highlights of the conclave were various sessions where the beneficiaries of the scheme shared their success stories before and after getting their first independent BioCARE R&D projects and how it made an impact in their careers. In order to make women scientists aware of the various opportunities and schemes available in the country like Startup India, Biotechnology Ignition Grant (BIG) and other career options in science, a special session was organized where Women Entrepreneurs, Science Journalists, Science managers motivated them to make and continue career in science.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Comments of the Committee

(Please see Para No. 8. of Chapter-I of the Report)

Recommendation (Para No. 3]

Woman Technology Park

“The Committee have been informed by Ministry of Science and Technology that more than 30 women technology parks have been supported in different parts of the country which provide one-step platform to address location specific or need based challenges faced by women through appropriate

technologies. The Committee believe that Women Technology Park (WTP) set up with the help of government agencies would be a boon for the rural poor. Exposing women to latest technology and entrepreneurial ideas involving demonstration and dissemination of rural technologies related to weaving, metal art ware, banana fibre extraction, construction and habitat services, agro and forest-based processing technologies can be a economic and social empowering measure catering to the dynamic needs of women empowerment, grand goal of our constitutional philosophy. The Committee recommend that more Women Technology Parks may be set-up in diversified sectors catering to regional needs and spread across the country to empower women and make them financially self sustainable. Demonstration of feasible projects and transfer of proven technologies to the society would improve the livelihood and quality of life of rural women by imparting necessary entrepreneurial skills. The Committee would desire that the Ministry of Science & Technology (DST&DBT) may work in tandem with the Skill Development Ministry and a multi-faceted approach may be developed to foster rural employment with self sufficiency and technological inclusion. The Committee recommend that in tune with the goals of the National Skill Development Programme of the Government of India there should be a larger integration of the goals and outcomes of the DST and Skill Development Ministry.”

Reply of the Ministry of Science and Technology

The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“Currently thirty eight Women Technology Parks (WTP) were supported in various parts of the country. Out of the 38, 16 are ongoing and rest have been completed.

Exposing women to latest technology and entrepreneurial ideas involving demonstration and dissemination of rural technologies—A few examples:

Technology	Demonstration/Dissemination
Rural technology related to weaving	<p>Revival of cotton weaving cluster Mangalgiri through training for skill enhancement.</p> <p>Improved dyeing facilities, design development and zari thread making facility.</p> <p>Training on Computer Aided Design (CAD) software for local craft design work to women artisans. Women Self Help Groups (SHGs) will be formed in Basani, Varanasi</p>
Banana fibre extraction	Banana fibre extraction from pseudo stems of banana at Women Technology Park, Annur Taluk, Coimbatore
Construction and habitat services	<p>Training programmes were arranged for vulnerable women in Tamil Nadu for generating income by promoting fly ash brick technology.</p> <p>Skill training in masonry, pre fab building elements and repairing house hold devices – fabrication of cement rings for tanks, slabs for covering drainage, tank covers, etc. was given at Women Technology Park in Wardha district, Maharashtra.</p>
Agro and forest-based processing technologies	<p>Value added products from areca nut seeds (Areca nut plates);</p> <p>Value added food products from tender mango leaves and tulsi.</p>

Other High end technologies	<p>ICT enabled technologies, skill enhancement training on food processing and preservation, craft designing and retail management.</p> <p>Training on operating CNC hot wire-cutter, training on chocolate 3D printing machine, training on making granite bricks, awareness about e-waste recycling. etc</p>
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Department of Science & Technology has initiated joint action with the National Skill Development Corporation (NSDC) to align various training programmes related to livelihood generation/income enhancement to National Skill Qualifications Framework (NSQF). The implementing agencies for the Women Technology Parks (WTPs) are advised to make proper framework, course curriculum of various trainings which are offered to the women beneficiaries through State Skill Development Council.

The Department of Biotechnology (DBT) supported Golden Jubilee Biotech Park for women, Chennai as an Mini Unique venture in Women Entrepreneur Development in the Biotech sector. Since its inception the Park has turned over 500 skill women Entrepreneurship, Technocrats and workers.

Biotechnology Industry Research Assistance Council (BIRAC), a Public Sector Undertaking of Department of Biotechnology has supported an incubator under Bio-Nest scheme at Sri Padmavati Mahilia Vidyalayam (Women's University) Tirupati, A.P. The incubator focuses on Women Entrepreneurship.

DBT has been supporting Biotechnology Based Programme for Women with the objective to promote the use of biotechnological processes and tools for the benefit of large number of women. The programme aims to create platform for self-employment generation among the target population through diffusion of proven and field-tested technologies by demonstration, training and extension activities. The focus of the programme is also to promote health, hygiene and nutrition besides agriculture and allied areas. A number of projects have been supported on Cervical and Breast Cancer Screening, Genetic Counselling and pregnancy related complications in women. Several training modules were prepared for creating awareness on health, nutritional food preparations and agricultural practices. A large number of women have been benefitted through implication of biotechnology based programme on floriculture, horticulture, cultivation of mushrooms, medicinal and aromatic plants, bio-fertilizers, organic farming, vermicomposting, sericulture, aquaculture, animal husbandry including poultry farming.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Comments of the Committee

(Please see Para No. of Chapter-I of the Report)

Recommendation (Para No. 4)

Training Programmes for Women Scientists

The Committee have been informed by the Ministry of Science & Technology that Training Programmes for Women Scientists are being conducted to foster Responsiveness, Commitment, Awareness of technological, economic and social developments and value of Accountability. The Committee have noted that as per data pertaining to training programmes conducted under Women Component from 2012 to 2017 has remained the same. In fact, the Committee are dismayed to find that the

number of training programme in Year 2016-17 has in fact dipped to nine. Further, the number of scientists trained has dipped from a high of 271 in 2011-12 to a low of 180 in 2016-17. The Committee find it a perplexing situation because with the growth of scientific manpower the trainings must also grow, but to the utter dismay things are going the other way. Further, the conduct / behavioural change of the employees must be measured to ensure that trainings have direct relationship with work related outcomes and that they are not in isolation. This would embolden the women work force and help her gain recognition and growth in their field of activity. The Committee believe that outcomes on scientific criteria for the trainings must be laid out and the effectiveness of training programmes in tune with the expected outcomes be formalized and the Committee may be informed of the action taken in the matter. The Committee recommend that the Ministry should take the issue seriously and enhance the imparting of training to women in Research and Development in the country.

Reply of the Ministry of Science and Technology

“The Department of Science & Technology conducts training programmes under the scheme, “National Programme for Training of Scientists/ Technologists working in Government Sector” including a “Women Component Plan”. On an average, 35 training programmes under general and women-specific components of the National Programme are conducted annually. However, in 2018-19, 45 programmes, including nine programmes exclusively meant for women scientists were proposed/ scheduled. Besides the women exclusive programmes, the general training programmes are also open to women participants. Interested women participants are free to apply either for women-exclusive or for general training programme.

Of the nine women-exclusive programmes conducted in the year 2016-17, the course content of five programmes were on behavioural subjects and four belonged to scientific/ technological subjects. This ratio has been maintained in the subsequent years.

In 2017, an Expert Committee was constituted to review the existing programmes and recommend improvement in the programmes, changes in the modalities and financial norms of the programmes.. The Expert Committee deliberated upon the training requirement of scientists and had suggested adoption of women specific training programmes. The topics suggested by the committee for inclusion in the women specific training programmes relate to subjects other than the domain expertise of scientists like 'Entrepreneurship Development', 'Leadership & Organisation Development', 'Community Resource Management', 'Environmental Leadership & Life Skills', 'Internet of Things', 'Biodiversity Conservation', 'Managing Change in Government Organisations', 'Communication & Presentation Skills' and 'Integrated Scientific Project Management'. These have been implemented during the year 2018-2019.

As regards the observation that conduct/ behavioural change of the employees must be measured, it is to be noted that all participants of training programmes are required to submit their feedback on various aspects of the programme. Most of the participants in their feed back have rated the programmes between very good and excellent on the aspects of "Usefulness in present job" and "Usefulness in future work/job." The report on the overall experience and responses of the participants of the programme received by the Department of Science & Technology from Directors of the training programmes also reflects the same. In addition, a representative from Department of Science & Technology is deputed to the training institute for interacting with the participants and course director for obtaining feedback. The benefits accrued from training is measured by the organisations to which the participants belong in their Annual Performance Appraisal Report (APAR). The format of APAR includes a column for suggesting areas of training to be undergone by the employee.

Department of Biotechnology (DBT) is supporting Biotech Industrial Training Programme (BITP) for providing hands-on training for six months to fresh B.E./B.Tech./M.Sc./M.Tech. students in

biotechnology. BITP provides industry-specific training to Biotech students for skill development and enhancing their job opportunities in biotech industries. DBT has provided Industrial training to 2132 women candidates in last five years.

(O.M. No. H-11013/6/2019-PU dated 20.06.2019)

Recommendation (Para No. 5)

Post-doctoral Fellowship (PDF) For Women

The Ministry of Science & Technology have informed the Committee that the Science and Engineering Research Board (SERB), a Statutory body of the Department of Science and Technology is implementing a National Post-doctoral Fellowship Scheme (NPDF) to identify motivated young researchers and provide them support for doing research in frontier areas of science and engineering. The Committee have been further informed that the Scheme has been designed to accommodate more women researchers by giving them five years of age relaxation for applying under the Scheme. More than 850 (36.6%) women scientists have been supported so far. Further, the Ministry have informed the Committee that Fifteen Pilot Projects have been sanctioned to premier academic institutes across the country under Vigyan Jyoti and all are in the process of implementation. In this context, the Committee strongly recommend that the number of Post-doctoral Fellowships must be increased and greater industry interface be ensured so that the Research and Development becomes a financially viable exercise too and this would further fuel the momentum of Women Empowerment.

Reply of the Ministry of Science and Technology

“A significant number of Women Scientists have been supported through the National Postdoctoral Fellowship Scheme of the Science and Engineering Research Board (SERB). Disciplines like Life Sciences have 44% of women representation among the awardees since inception of the scheme. The Scheme has been designed to accommodate more women researchers by providing them five years of age relaxation for applying under the Scheme. Maternity leave as per the Govt. of India instructions issued from time to time is also admissible to female candidates in all categories. Process for identifying researchers as fresh fellows has been initiated for 2019-2020. The Department (DST), in partnership with MHRD, is implementing a scheme called IMPacting Research INnovation and Technology (IMPRINT) aimed at bridging the gap between scientific knowledge base and fruitful translation of the same through engineering invention and technological innovation for the betterment of society. This Scheme has strong industry participation and considerable number of manpower positions is supported. Women researchers working in these IMPRINT projects gain first-hand experience of industry relevant research. Initially, 500 National Post Doctoral Fellow (NPDF) positions per year were getting approved. However, in view of the positive response from the scientific community, a total 2748 NPDF have been sanctioned. In this program, 1041 women researchers were supported. As on April 01, 2019, out of 1578 ongoing NPDF projects, 628 are women researchers. Similarly 123 projects were initially sanctioned under IMPRINT. In the second call, 499 proposals were received out of which, 56 projects were recommended. In this program more women researchers are likely to be involved in the activities which links conventional R & D with industry. Department of Biotechnology (DBT) is providing fellowship for post-doctoral research in frontier areas of Biotechnology and Life sciences at premier institutions in India. The fellowship is initially awarded for a period of two years and support can be extended for 1-2 years based on review of

progress. The objective of DBT-RA program is to train and nurture young scientists and generate critical mass of trained manpower in modern areas of biology and biotechnology and build a robust postdoctoral base in country. In last five years, total 276 (57%) woman candidates awarded DBT-RA out of 484 candidates.”

(O.M. No. H-11013/6/2019-PU dated 20.06.2019)

Recommendation (Para No. 6)

Science & Technology Policy - 2013: the prospects for women

“The Committee note that attracting talented and bright minds towards careers in science, research and innovation is one of the main objectives of the STI Policy -2013. This policy includes Innovation for inclusive growth implying ensuring access, availability and affordability of solutions to as large a population as possible, Establishing world class infrastructure for R&D for gaining global leadership in some select frontier areas of science, positioning India among the top five global scientific powers by 2020, linking contributions of science, research and innovation system with the inclusive economic growth agenda and combining priorities of excellence and relevance, creating an environment for enhanced Private Sector Participation in R&D, Enabling conversion of R&D outputs into societal and commercial applications by replicating hitherto successful models as well as establishing of new PPP structures, triggering changes in the mindset and value systems to recognize, respect and reward performances which create wealth from S&T derived knowledge.

The Committee believe that the goals are laudable and a good roadmap for developing the country as a scientific power is essential so that bright minds are attracted towards science and technology. Vacancy data in various organizations as suggested by the Ministry about their own initiatives are not very encouraging. Therefore the Committee recommend the Ministry to ensure

better Industry interface, which is required so that number of unemployed persons are reduced. Further, the schemes under a single umbrella scheme-KIRAN- 2014, Women Scientist Scheme-A (WOS-A) for basic and applied research in five streams may be reviewed and broadened so that a greater number of Researchers are included in the scheme. The Committee desire that the Ministry of Science & Technology and Ministry of Human Resources Development intimate about the action taken in the matter at the earliest.”

Reply of the Ministry Science and Technology

The Ministry Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“The Department agrees with the recommendations and the review process of Women Scientist Scheme-A (WOS-A) has been initiated with an objective to broaden the horizon and improve the employability of women with inclusion of new domain of industrial R & D.

Ever since its inception, the Fund for Improvement of S&T Infrastructure (FIST) Program under the R&D Infrastructure Division, DST has provided sustainable funding over last eighteen years that has made deep impact in many departments/ PG Colleges across the country in carrying out advanced research in contemporary areas of science and technology and also set-up modern teaching facilities. FIST Program has been instrumental in establishing state-of-the-art facilities for performing high end research and has thus benefited academicians and researchers across the country.

The realm of the FIST Program has engendered many prestigious Women’s PG Colleges across the country covering most states. Some of these prestigious colleges include Sophia College for Women, Mumbai; Hans Raj Mahila Maha Vidyalaya, Jalandhar; Raja Narendralal Khan Women’s College, Midnapore; Lady Brabourne College, Kolkata; Lady Doak College, Madurai; Maharani

Lakshmi Ammanni College for Women, Bengaluru, Bethune College, Kolkata; Government College for Women, Thiruvananthapuram; Holy Cross College, Kanyakumari; Loyola College, Chennai; Shri Vishnu Engineering College for Women, Bhimavaram; Justice Basheer Ahmed Sayeed College for Women, Chennai; Mercy College, Palakkad; Post-Graduate Government College for Girls, Chandigarh; Sri Satya Sai College for Women, Bhopal; Mahant Darshan Das Mahila College, Muzaffarpur etc.

Currently, a total of Rs 38.78 crores (approximate) have been invested in about 52 Women's PG Colleges under the FIST Program. The year wise details since the year 2009-2010, are provided in Table below:

Table 1

S. No.	Financial Year	No. of Women's PG College supported	Total amount (Rs in lakh)	Average support (Rs in lakh)
(1)	(2)	(3)	(4)	(5)
1	2009-10	02	71.50	35.8
2	2010-11	05	299.0	59.8
3	2011-12	04	330.0	82.5
4	2012-13	03	206.0	68.7
5	2013-14	08	658.0	82.2
6	2014-15	05	380.0	76
7	2015-16	10	663.0	66.3
8	2016-17	04	395.0	98.8
9	2017-18	07	585.0	83.6
10	2018-19	04	290.0	72.5
Total:		52	3, 877.50	74.6

Over the years, some well-known Women's Universities have also been the recipients of DST FIST support. The details of the support provided to these Universities are provided at Table 2 below:

Table 2

University	Department	Sanctioned Amount (Rs in lakh)
(1)	(2)	(3)
Sri Padmavati Mahila Visvavidyalayam, Tirupati, Andhra Pradesh	<u>FIST 2008</u> ♦ Applied Microbiology	33.0
	<u>FIST 2014</u> ♦ Institute of Pharmaceutical Technology	58.0

	<u>FIST 2016</u> ♦ Sericulture	49.0
Mother Teresa Women's University, Kodaikanal, Tamil Nadu Banasthali Vidyapith, Banasthali, Rajasthan	<u>FIST 2014</u> ♦ Biotechnology	50.0
	<u>FIST 2004</u> Chemistry	22.0
	<u>FIST 2008</u> Bioscience	67.0
	<u>FIST 2015</u> Bioscience & Biotechnology	165.0
	Total:	444.0

Under BioCARE Scheme Department of Biotechnology (DBT) has been able to provide first independent R &D projects to 315 women scientists of India. Under this programme, consolidated emoluments are provided to unemployed women scientists in addition to the Research Grant. 28 women scientists have got permanent employment in various Institutions, Universities, Colleges and industries so far.”

(O.M. No. H-11013/6/2019-PU dated 20.06.2019)

Comments of the Committee

(Please see Para No. 21 of Chapter-I of the Report)

Reply of the Ministry of Human Resource Development

The Ministry of Human Resource Development are silent on the reply.

Recommendation (Para No. 7)

Representation of Women in Research Organisations

“The Committee note that out of a total strength of 12342 employees in CSIR only 2148 are women. Of the total of 3513 scientists in the CSIR, 645 are women scientists as of December 2017. The Committee believe that it is matter of concern that only 17.40 percent of the total employees are women,

and only 18.36 per cent of the total scientists are women. Gender equality in research has a vibrant impact on the redressal of women centric needs and ensuring motivation of the women in Research and Development. In order to ensure this the Committee recommend the Ministry to set up a committee to enquire into the reasons of lop sided growth and taking appropriate measures for engaging of women scientists in the research establishment in the country. The Committee believe that many of the women who pursue post-graduate academic course in science stream do not end up in R&D or in education sector due to many social and family obligations. This needs to be addressed by a flexible approach. The Committee recommend that the Ministry conduct studies/surveys relating to the issue of low representation of women in various research establishments of the country to address them in a time bound manner about the efforts taken to tackle the issue of under representation of women in research and scientific establishments under the Ministries of Science and Technology and Human Resources Development.”

Reply of the Ministry of Science and Technology

The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“The Ministry has conducted various studies and it was found that 17% of the working strengths in the Autonomous Institutions are women. DST is exploring the possibilities to encourage women scientists to apply for various positions in different research establishments.

The Ministry/Department and Council of Scientific and Industrial Research (CSIR) shares the concern of the Committee that as of December 2017, only 17.40 % of the total employees in CSIR are women and only 18.36 % of the total scientists employed in CSIR are women.

CSIR has taken several policy measures such as: (i) providing more R&D opportunities to women scientists so as to expose them to next generation technologies; (ii) encouraging them to take up

leadership position; and (iii) training women scientists and technologists to acquire entrepreneurial skills to motivate the women towards R&D and to enhance their engagement in its research establishments.

An Empowered Committee 'Standing Committee for Promotion of Women in Science' has been constituted by Department of Science and Technology in the year 2016 to enquire into the lop sided growth of women in R&D. Representatives of CSIR are being invited to the meetings of the Committee.

In 15 DBT Autonomous Institutions the total sanctioned scientist position is 573 and on roll position is 315. The total number of women scientists working in these institutions is 84. DBT Autonomous Institutions have been taking numerous measures for promoting women scientists.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Comments of the Committee

(Please see Para No. 25 of Chapter-I of the Report)

Reply of the Ministry of Human Resource Development

The Ministry of Human Resource Development are silent on the reply.

Recommendation (Para No. 8)

Scholarships/aids/facilities for women

“The Committee are glad to note that various central sector schemes of scholarship for college and university students, Pragati Scholarship Scheme, Post-doctoral Fellowship to Women Candidates, Post-

Graduate Indira Gandhi Scholarship Scheme for Single Girl Child, Swami Vivekanand Single Girl Child fellowship for research in social sciences etc. The Committee were informed that for the unemployed women holding P.hD degrees and intending to pursue post-doctoral research on full-time basis, the UGC has been providing 100 fellowships per annum with the fellowship amount of Rs. 38000 per month for fresh candidates and Rs. 46500 per month after 2 years and contingency amount of Rs. 50000 for 5 years. It was also informed that the total number of slots available under the Dr. S. Radhakrishnan Post-doctoral Fellowship for Women in Humanities and Social Sciences is 200 per year. Further, the Committee are glad to note that the UGC has introduced Swami Vivekanand Single Girl Child Fellowship for research in Social Sciences during 2014-15 and 121 candidates were selected during the reporting year. The Committee also desire that in order to ensure that there is a wide presence of women, greater financial support is required so that creative capacities of women are manifested in the research arena. The Committee recommend that the number of slots for scholarships under all the above schemes should be increased suitably by the Ministry of Human Resources Development. The Committee desire that the Ministry inform about the action taken in the matter regarding increase in the number of scholarships under various schemes of the UGC and the Central Government.”

Reply of the Ministry of Human Resource Development

The Ministry of Human Resource Development in their action taken reply on the aforementioned recommendation stated as under:-

“The scheme of ‘Swami Vivekananda Single Girl Child Fellowship for Research in Social Sciences’ was started in 2014-15 to encourage women to pursue Ph.D. in Social Sciences including Humanities and Languages. Since the number of slots has not been limited/fixed, all the applicants, who are found eligible, are given fellowship to pursue research leading to award to

Ph.D. For the selection year 2018-19, UGC has awarded the fellowship to 269 women. Further, to cover more women scholars, UGC has decided to extend the ambit of this scheme for all the streams, beginning 2019-20.

The scheme namely 'P.G. Indira Gandhi Scholarship for Single Girl Child' is in inception since 2006-07 and envisaged to provide financial assistance to selected candidates being Single Girl Child for pursuing Post-graduation on full time/regular basis in Higher Educational Institutions in India. Since this is also an incentive scheme, there is no cap on the number of selections. Therefore, all the eligible applicants receive scholarship under this scheme. For the selection year 2018-19, UGC has selected 2445 girls under the scheme.

In view of the recommendations of the Committee, UGC has already initiated the process of revision of guidelines of various scholarship/fellowship schemes including (i) Post Doctoral Fellowship for Women Candidates (ii) Swami Vivekananda Single Girl Child Fellowship for Research in Social Sciences (iii) P.G. Indira Gandhi Scholarship for Single Girl Child'. It is contemplated to increase the slots to increase the participation of women in higher studies.”

(OM No13-13/2019-U.5 dated 7.01.2020)

Comments of the Committee

(Please see Para No. 28. of Chapter-I of the Report)

Recommendation (Para No. 9 (i))

Participation of Women in R&D relating to AYUSH

The Committee note that participation of women in Research and Development relating to Indian Medical Sciences such as Ayurveda, Yoga, Naturopathy, Unani, Siddha and Homeopathy is very important as it is one of the alternative and traditional system of medicine of the country. The Committee are glad to be informed that National Institute of Siddha, (NIS)Chennai has reported that out of 46 PG

students during 2017-18, 38 (83%) are women. Further, out of 26 faculty members, nine are women. Morarji Desai National Institute of Yoga (MDNIY), New Delhi has reported that out of 21 faculty members, 09 are women. In All India Institute of Ayurveda (AIIA), New Delhi there are 84 female MD scholars at present which is approximately 75% of the total MD students. In Institute for Postgraduate Teaching & Research in Ayurveda (IPGTRA), Jamnagar there are a total of 11 females as faculty members and 111 female scholars are involved in the field of medical research. During 2017-18 in National Institute of Homeopathy (NIH), Kolkata out of 35 MD students, 22 are women which is more than 50 per cent. At National Institute of Unani Medicine (NIUM), Bangalore, 53.1% MD students are women and 27.7 % faculty members are women. The Committee are further glad to note that three Institutes, i.e, AIIA, New Delhi, National Institute of Naturopathy (NIN), Pune and NIS, Chennai are headed by women and in addition to above, the Research Councils have also reported good participation of women scholars in their institutes. The Committee note that the number of female researchers is more than 50% of the total researchers in Research Councils. There is almost equal participation of female scientists in international conferences. The Committee are happy to note that the Ministry of AYUSH ensures that there is no discrimination against the female researchers and ensures that government instructions related to female employees are complied. The Committee recommend that current participation of women in various systems of medicines under AYUSH should be sustained and more proactive steps be taken by the Ministry to further increase the prospects for women.

Reply of the Ministry of Ayush

“The M/o AYUSH through its Research Councils and National Institutes ensures equal opportunities to its women researchers by allotting projects and growth avenues to them in an unbiased manner. There is a sincere commitment to ensure these efforts are not only sustained, but also increased as follows:-

- a)** CCRH has a strength of 153 female research personnel (including contractual) out of 299 personnel in all the Units/Institutes located at different places.
- b)** At present in the CCRAS 50% permanent female researchers are working. Further, more than 50% Contractual female staff are working in various outreach activities viz. THCRP, RCH-SCSP, AMHCP & NPCDCS programme.
- c)** In last three years IPGTRA, Jamnagar was successfully headed by 2 women as Director for a combined period of almost 15 months. Also, out of 26, a total of 10 i.e. 38.46 % female employees are working efficiently in the teaching as well as research.
- d)** NIN Pune has more than 50% participation of women in the Research Methodology fellowship programme. NIN, Pune has 40% employees as women including the head of the institute, i.e. Director. NIN Pune has also reserved 50% of seats in the “Treatment Assistant Training Course” (TATC) conducted towards gender balance.
- e)** In 07 OPDs of Yoga and Naturopathy run by CCRYN, 05 are managed by women Yoga and Naturopathy Physicians/SRFs. Moreover, Council is also running 8 Yoga and Naturopathy Wellness Centres; three (03) such Wellness Centres are managed by women Yoga and Naturopathy Physicians/SRFs.
- f)** CCRS, Chennai is being headed by a Women and incharge of one of the institute under CCRS is also a Women scientist.
- g)** NEIAH, Shillong has 16 regular women employees out of a total of 35 employees (46%).
- h)** NIUM, Bangalore has 30% women faculty.
- i)** In MDNIY, the number of women staff is 10 out of 21 (48%).
- j)** In NIA, Jaipur out of 72 regular employees, 23 are women, i.e., 32%.
- k)** AIIA, New Delhi is also being headed by a Woman Director.

Recommendation (Para No. 9 (ii))

Participation of Women in R&D relating to Health and Family Welfare

“The Committee desired to know from the Ministry of Health and Family Welfare regarding details of female researchers to the total researchers and efforts to provide support for involvement for women in the field of medical research. However, the Committee note that no such central and country-wide data has been compiled by the Department of Health or Indian Council of Medical Research (ICMR) since a large number of scientists including women scientists are engaged in the Bio-medical research at various medical colleges, research institutes through their internal funding or grants from several agencies/organizations. The Committee believe that in an age of information revolution, various database of empowerment, inclusion and equity is the cornerstone for effective formulation of policies for widening the participation of women in the development of the country. The Committee recommend that a centralized data be created by the Ministry of Health regarding involvement of female researchers in the field of medical sciences and research.

The Committee note that in the National Institute of Epidemiology, Chennai only three women scientists are present out a total number of 18 scientists, the number for National Institute of Medical Statistics, Delhi is 3 out of 16, 0 out of 5 in National Animal Resource Facility for Bio-medical research, Hyderabad, 1 out of 21 in National Institute for Research in Tribal Health, Jabalpur, 0 out of 15 in Rajendra Memorial Research Institute of Medical Sciences, Patna, 0 out of 6 in Regional Medical Research Centre, Port Blair, 3 out of 16 in National Jalma Institute of Leprosy and other Myco-Bacterial diseases (NJILMOD) Agra. Further, the total percentage of women scientists in ICMR Institutes is 33%. The Committee are further appalled to note that the information furnished by ICMR institutes regarding women researchers speaks of under-representation of women in various institutes. The Committee recommend that a detailed

policy should be framed and implemented in a manner so that the regional disparity and under-representation of women in the field of Research and Development is taken care of. In States where the socio-cultural barriers are against the involvement of women in higher education, research and development, more focus should be given so that the cultural norms which act against participation of women in higher education, research and development should be addressed and women break free from the shackles of stereotypes and prejudices which work against them. The Committee further recommend to the Ministry of Health and Family Welfare to find feasibility of appointment of women researchers in under represented and backward regions so that they become change agents and create a climate of participation and inclusion in the field of higher education research and development so that the grand constitutional vision of women empowerment is achieved.”

Reply of the Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare in their action taken reply on the aforementioned recommendation stated as under:-

“The Department of Health Research has obtained data from D/o Science & Technology, D/o Biotechnology, Indian Council of Medical Research and various schemes of the Department. This data is being processed and final action taken reply will be submitted shortly.”

“A detailed policy on regional disparity and under-representation of women does not exist presently in r/o ICMR/DHR. This is also because research projects are awarded on the basis of scientific soundness and merits of the research proposal. However, this will be taken care of as a future strategy.”

(OM No. H.11016/03/2019-HR dated 27.12.2019)

Comments of the Committee

(Please see Para No. 31 of Chapter-I of the Report)

Recommendation (Para No. 10 (i))

Achievement in Research and Development relating to Women's Health and scope for further prospects for Women in R & D relating to Health.

“The Committee believe that Women Health is the most vital ingredient for achieving of women empowerment as envisaged in the constitutional aspirations of equality for women. The Committee note that the Ministry of AYUSH have developed various drugs for dealing with women health. It has also been informed that adequate research on women related diseases have been done and attempt has been made to provide healthcare to women through institutes under research council, national institutes and through its centrally sponsored schemes of National AYUSH Mission. The Committee are glad to know that there are 2 Homeopathic Medical Colleges running in the country through respective State governments which are exclusively for women. In this context, the Committee recommend that performance appraisal and actual outcome be conducted to ensure that the grand vision of the AYUSH is translated into reality. The Committee also recommend the Ministry of AYUSH to inform about the findings in the matter and to take greater steps to ensure more research which are cost-effective and women disease-centric be conducted without losing focus on other areas of research.”

Reply of the Ministry of Ayush

“The Research Councils under Ministry of AYUSH and the National Institutes are engaged in research and health care activities relating to women. The details of the action taken by the Research Councils and National Institutes are as under:

- a) The women disease-centric projects of CCRH and their outcomes are tabulated as Annexure 1.
- b) CCRYN has undertaken following research projects on women diseases:
 - 1. Integrated Approach of Yoga Therapy in the Management of Cancer (Breast Cancer).
 - 2. Effect of integrated approach of Yoga therapy for metastatic breast cancer patients and study of DNA repair mechanisms relevant to cancer.
 - 3. A Study to assess acute mental stress induced changes in EEG, Cognitive behaviour and Neurosteroids across the menstrual cycle and effect of meditation on stress induced changes.
 - 4. The effect of Yoga in prevention of pregnancy complications in High Risk Pregnancies.

The Brief details of these research projects are annexed at Annexure-II.

- a) CCRUM is successfully treating several diseases including those diseases specific to women e.g. Sailan-ur-Raham (Leucorrhoea), Kasrat-e-Tams (Heavy Menstrual Bleeding), So-ul-Qiniya (Anaemia) etc.
- b) Women Centric projects of CCRS:-

- 3 clinical projects focussing on cervical cancer, anemia and fibroid uterus have been completed.

- Ten IMR projects are in progress under IMR stream of CCRS represented by Women Scientists in R&D.

b) The CCRAS has under taken a project “Feasibility of introducing Ayurveda intervention in Reproductive and Child Health (RCH) in PHCs of selected Gadchiroli district of Maharashtra (Effectiveness of Ayurvedic intervention for Ante-natal care (Garnhini Paricharya) at Primary Health Care level: A Multi Centre Operational study)”. It will be executed through Regional Ayurveda Research Institute for Mother & Child (RARI), Nagpur. The aim of the this project is to see the feasibility of introducing Ayurvedic Interventions in reproductive and Child Health (RCH) though integrative health care services. The project will be implemented in 30 PHCs of Gadchiroli district of Maharashtra.

In this study, the formulations viz. Ayush-AG, Ayush-ADE candy, Ayush- GG, Ayush-PK Avaleha, Ayush- SDM tablet and Ayush BL oil developed by CCRAS through systematic scientific studies, comprising of quality control and standardization, preclinical, safety/toxicity studies and clinical studies have been selected for antenatal and postnatal care of pregnant women. The project is proposed to be launched on 6th August 2019.

- Reproductive and Child Health Care programme under Schedule caste sub-plan (SCSP) has been initiated at 19 Institutes of CCRAS across the country in a project mode.

- Other clinical projects on different gynaecological disorders like-Leucorrhoea, abnormal uterine bleeding, dysmenorrhoea, menopausal syndromes, Poly Cystic Ovarian Syndromes, Post natal care through Ayurveda have also been under taken by CCRAS.

c) In last three years, total 18 research works were carried out on women centric diseases and drugs used for women in IPGT&RA, Jamnagar.

Out of them, 2 research works were done on '*role of Rasayana during first trimester of pregnancy*', one research work was done on '*role of Shatavaryadi choorna during 2nd trimester of pregnancy*', one study on '*role of Ksheer Basti in IUGR w.s.r Garbha Kshaya*', one on '*abnormal vaginal discharges during pregnancy*' and one research work on '*role of Basti, Yonipoorana and Nasya for easy delivery*'.

Also, two research works were carried out on '*Uterine fibroid*', four on '*PCOD*', two on '*abnormal vaginal discharges*', while on '*Female Infertility*' different research works have been done on various factors like on '*anovulatory factor*' Three works were carried out , on '*Tubal blockage*' 2 research were carried out and on '*endometrial factor*' 2 research works were done. One research on '*Ovarian cyst*' and two works on '*effect of Agnikarma in cervical erosion*' were done. In addition to these, survey studies were carried out on PCOD, female infertility, abnormal vaginal discharge during pregnancy and cervical erosion.

Among these research works promising result were seen in PCOD, Tubal blockage, cervical erosion and IUGR.

d) NIH, Kolkata has enrolled 05 no. of clinical trials under CTRI related to women related diseases which are undertaken by PG female students under the supervision of women faculty.

e) National Institute of Siddha, Chennai is undertaking one Public Health Initiative project- "Promoting the Siddha interventions for Anaemia (Pandu) among rural women at adolescent age in Virudhunagar District, Tamil Nadu". The project is on-going and scheduled to be completed by September 2019. The project is aimed at treating more than 2000 anaemic patients among

adolescent women with Siddha Medicine and improving the awareness level of patients about the anaemic conditions and its consequences.

Further, the M/o AYUSH has also taken a view of this recommendation and more women disease-centric researches will be taken in future.”

(O.M. No. H-11013/4/2019-CDN dated 9.08.2019)

Recommendation (Para No. 11)

Budgetary Issues

“The Committee note that all the projects sanctioned by the Ministry of Science and Technology are evaluated by an Expert Committee of Scientists and the said Committee monitors outcomes of the projects based on Annual Reports as well as completion reports whenever available.

The Committee further note that all the existing R&D Schemes were evaluated for their effectiveness, delivery and outcomes vis-a-vis objectives last year and based on the evaluations, schemes have been revised taking into account suggestions of experts as well as other stakeholders. The Committee believe that Research Project Evaluation Criteria are seminal for the achievement of outcomes of Research and Development.

The Committee are further glad to be informed from the Ministry of Human Resources Development that the Department of School Education & Literacy has 100 % women – specific scheme viz. National scheme for incentive to Girl child for Secondary Education for which the budget allocation in F.Y. 2018-19 is Rs. 255.90 Crore. Similarly, the Department of Higher Education has also 100% women-specific scheme viz. Prime Minister's Girls' Hostel for which the budget allocation in F.Y. 2018-19 is Rs.

30.00 Crore. Further, the Committee note that there are other schemes which are under 30% Women specific programmes. The Committee recommend that the composition of such schemes should be strengthened further to augment capacity building in women for furthering Research and development activities.

While appreciating that the actual expenditure of the Department of Health Research including Indian Council of Medical Research (ICMR) has been consistently growing for the last 10 years, the Committee are disheartened to note that the allocation of budget on health research works out to be 2.3 per cent only, *i.e.*, allocation of Rs. 1800 crore out of the total allocation of Rs. 77,069 crores for the Ministry of Health and Family Welfare. As such, the Committee recommend that allocation on health research may suitably be enhanced so that the R&D on health sector do not suffer for want of money thereby furthering the prospects of women participation in Research and Development activities of Health and Family Welfare.

The Committee note under Ministry of AYUSH that there is a wide gap between grants given to Central Council for research in Ayurvedic Sciences (1678.39 crores) and Central Council for Research in Yoga and Naturopathy (192.22 crores). Further the grants for National Institutes in North-Eastern Regions like North-Eastern Institute of Ayurveda and Homeopathy, Shillong and North-Eastern Institute of AYUSH/Folk medicine, Pasighat is very low *i.e.*, Rs.82.38 crores and Rs.34.17 crores respectively. The Committee believe that the financial and psycho-social burden of diseases in the country can be tackled by a holistic approach to integrate research practices of various healing systems. Further, the Committee recommend that in the context of budgetary allocations, the issue of uniform regional development and access to healthcare should be given prime consideration. The Committee recommend that the Ministry of AYUSH take up the issue of increased allocation of budgetary resources for Health Research with Ministry of Finance.”

Reply of the Ministry Health and Family Welfare

The Ministry of the Health and Family Welfare in their action taken reply on the aforementioned recommendation stated as under:-

“Budgetary demand is submitted on need basis. Budget allocation for the current year 2019-2020 is Rs. 1950 crore against Department’s projected requirement of Rs. 2654 crore. This is against the net budget allocation of Rs. 62659 crore (gross Rs. 93035 cr.) of the M/o Health and Family Welfare, Thus, the allocation for DHR including ICMR comes to about 3%. Efforts will be made to maximize research activities/proposals for presentation of budget demand for inclusion in the budget of M/o Health and Family Welfare thereby furthering the prospects for women participation in Research and Development activities of Health and Family Welfare.”

(OM No. H.11016/03/2019-HR dated 27.12.2019)

Reply of the Ministry of Ayush

“The Ministry of the Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The funds allocated during the last five years to Central Council for Research in Ayurvedic sciences (CCRAS), Central Council for Research in Yoga and Naturopathy (CCRYN), North- Eastern Institute of Ayurveda and Homeopathy (NEIA&H), Shillong and North-Eastern Institute of AYUSH/ Folk Medicine (NEIFM), Pasighat are as detailed below:

Year	CCRAS	CCRYN	NEIA&H, Shillong	NEIFM, Pasighat
2014-15	129.07	15.94	24.00	13.50

2015-16	144.00	15.24	14.00	6.40
2016-17	170.00	30.00	9.00	6.00
2017-18	175.00	32.00	10.00	10.00
2018-19	252.91	29.00	18.00	10.00
Total	871.68	122.18	75.00	45.90

The funds are allocated to the Councils/Institutes on the basis of the budgetary allocation made by the Ministry of Finance and on the basis of the requirement of the concerned Council/Institute.”

(OM No. H-11013/4/2019-CDN dated 9.08.2019)

Comments of the Committee

(Please see Para No. 38 of Chapter-I of the Report)

Recommendation (Para No. 12 (ii))

Miscellaneous issues: *Need for safeguarding women from harassment related issues in institutions of Higher Education and R & D.*

The Committee are glad to note from the Ministry that Department of Science and Technology has not received any complaints or grievance about gender based violence and sexual harassment from the beneficiaries of its programmes in research and development under the KIRAN Scheme. Further, the Committee were informed that 4 cases of sexual harassment were reported during the last five years and 5 cases were reported in respect of DBT institutions. The Committee were also informed that internal complaints committee has been set up by the autonomous institutes as per the 'Sexual harassment of women at workplace, 2013 Act. Based upon the reply of the Ministry, the Committee are of the view that

possibility of harassment of women at workplace in both the higher education and research and development sector is always present. In view of the fact that women researchers work in a fearless environment and are able to actualize their potential, the Committee recommend that widest possible dissemination of provisions of the law pertaining to sexual harassment of women at workplace should be done. An online grievance redressal mechanism including a toll free number and acceptance of complaints should be instituted without fail. In the course of investigation of the complaints regarding harassment made by the women researchers/scholars/students, they must be given ample protections by the authorities concerned. The Committee also recommend that the various institutions under the Ministry of Science and Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of AYUSH should give wide publicity regarding the provisions of the Act so that the prospects for women in the field of research and development grow in a healthy and secure atmosphere. The Committee would like to be informed about the action taken in the matter by the various ministries concerned.

Reply of the Ministry of Science and Technology

“Widest possible dissemination of provisions of the law pertaining to sexual harassment of women at workplace should be done:

Action Taken

- (i) The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 has been uploaded on the website of the Department.
- (ii) The repository also features a Handbook which provides information about the Act in an easy to use practical manner.
- (iii) Composition of Internal Complaints Committee of Department of Science and Technology along with Contact details has also been displayed on the website of the Department.

(iv) Dos and Don'ts regarding sexual harassment of women at workplace has been displayed at prominent places in the office.

(v) A complaint box to submit any case of sexual harassment has been installed in an easily accessible place.

(vi) To ensure secrecy of the complainant, the Complaint box has been kept in a place outside the range of the CCTV cameras.

(vii) Workshops are conducted at regular intervals to sensitize women on the provisions of Prevention, Prohibition and Redressal of Sexual Harassment of Women at Workplace Act, 2013.

An online grievance Redressal mechanism including a toll free number and acceptance of complaints should be instituted without fail:

Action Taken

(i) To provide a platform for speedier remedy to women facing sexual harassment at workplace as envisaged under the Act, an online portal to report complaints of Sexual Harassment at Workplace i.e. Sexual Harassment electronic Box (SHe-Box) portal has been launched by Ministry of Women and Child Development.

(ii) This website link of the SHe Box portal has been incorporated in the website of Department of Science & Technology for facilitating women for registration and tracking of their complaints related to sexual harassment at workplace.

(iii) She-Box also provides an opportunity to nodal administrative authority to monitor the progress of inquiry conducted by the Internal Complaints Committee (ICCs).

(iv) Composition of Internal Complaints Committee of Department of Science and Technology along with their Contact details has also been made public on the website for easy access to the aggrieved women to contact them.

(v) A dedicated email id i.e. iccsh-dst@gov.in has been created by the DST to receive or monitor the complaints related to sexual harassment of women at workplace.

In the course of investigation of complaints regarding harassment made by the women researches/ scholars/ students, they must be given ample protections by the authorities concerned:

Action Taken

(i) The name of the complainant is kept confidential from other employees during the investigation.

(ii) As per the Act, during the pendency of an Inquiry, on a written request made by the aggrieved woman, the ICC, may recommend to the employer to:

(a) Transfer the aggrieved woman or the respondent to any other workplace; or

(b) Grant leave to the aggrieved woman up to a period of three months; or grant such other relief to the aggrieved woman as may be prescribed.

Various institutions under the Ministry of Science & Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of Ayush should give wide publicity regarding the provisions of the Act so that the prospects for women in the field of research and development grow in a healthy and secure atmosphere:

Action Taken

Internal Complaint Committee (ICCs) have been constituted in all subordinate, attached and autonomous offices under the administrative control of Department of Science & Technology for dealing with cases related to Sexual Harassment of women at workplace.

The Department of Biotechnology is implementing **Biotechnology Career Advancement and Re-orientation Programme (BioCARE)** for women scientists. The purpose of the scheme is to build capacities for women scientists employed fulltime in Universities and small research

laboratories or unemployed women scientists after a career break so as to help them undertake independent R&D projects.

Autonomous institutions under DBT have been following the guidelines laid down by Government of India in providing equal opportunities and facilitating women with special needs. The institutions have taken several steps to facilitate women with special needs viz. establishment of crèche / day care facility installation of lift, disabled friendly toilet, ramp with handrails etc.

The autonomous institutions under DBT have taken active steps in safeguarding women from harassment and related issues. The institutions have Internal Complaint Committee / Sexual Harassment Complaint Committee to provide a healthy and congenial atmosphere to women staff and students.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Reply of the Ministry of Human Resource Development

“In order to improve the safety of all women, including students and employees, and to provide a healthy and secure atmosphere for them on the campus in Higher Educational Institutions(HEIs), following initiatives have been taken:

A. Gender Sensitization in Higher Education:

The UGC set up a Task Force to “Review the Measures for Ensuring Safety of Women on Campuses and Programs for Gender Sensitization” on 8th January, 2013, to assess the situation prevailing in all institutions of higher learning to ensure the freedom, safety and security of girls and women, in particular, and the entire youth in general. The Task Force came up with several fundamental and far-reaching recommendations. All of these are based on the principles of Equality and Justice guaranteed by the Constitution, including Rights to

Dignity, Bodily Autonomy and Integrity enunciated in the Bill of Rights for Women in the Justice Verma Committee Report of January, 2013, and are in consonance with the Vishaka Guidelines, the Sexual Harassment at Workplace Act, 2013 and Criminal Amendment Bill, 2013.

B. UGC has notified UGC (Prevention, Prohibition and Redressal of Sexual Harassment of Women Employees and Students in Higher Educational Institutions) Regulations, 2015 which being statutory in nature, are binding on Universities and Colleges. It is available on UGC website at https://www.ugc.ac.in/pdfnews/7203627_UGC_regulations-harassment.pdf.

C. UGC has issued Guidelines on safety of students on and off campuses of higher educational institutions. It is available on UGC website at https://www.ugc.ac.in/pdfnews/4006064_Safety-of-Students-Guidelines.pdf.

D. Development of Women's Studies in Indian Universities and Colleges:

Women's Studies Centres have been established in the University System in the VII Plan which have been continued in the subsequent Plan periods.

Objectives of the Scheme:

- To provide financial assistance to Women Studies Centres for expansion of Women Studies through teaching, research and field action.
- Inter disciplinary approach and theoretical grasp to enhance the understanding of society by highlighting feminist perspectives on social transformation, development and processes of exploitation.
- Constant interaction with field reality through field action programmes that feed into academic activity.

At present, 159 (84 in Universities and 75 in Colleges) Women's Studies Centres have been established in various Universities and Colleges under the scheme "Development of Women's Studies in Indian Universities and Colleges".

With a view to increase number of female students in undergraduate programs of NITs and IEST, the Government has decided to increase female enrolment from existing 14% to 20% over a period of 2-4 years by creating supernumerary seats.

E. Online Student Grievance Redressal Portal:

UGC has online student grievance redressal portal that facilitates students / complainants to lodge his or her grievance, send reminder and view status on action taken with regard to their grievance(s). The basic aim of the portal is to ensure transparency in admissions, prevent unfair practices in higher educational institutions and provide a mechanism for redressal of their grievances. The system also facilitates the lodging of complaints for redressal of women related grievances and sexual harassment.

F. Development of a dedicated portal:

UGC has also initiated the process for creation of a dedicated online portal for redressal of Women grievances.

All the IITs and 23 IITs have an Internal Grievance Committee and uses online CPGRAMS portal for registering grievances to safeguard women from harassment related issues.

All NITs and IEST, Shibpur have Internal Complaints Committee/ Cells constituted in accordance with extent rules to prevent sexual harassment of women at workplace. The Institutes have also formed cells/ online mechanism for acceptance of complaints and redressal of grievances of women and students in these Institutes. Besides this, wider dissemination of information is organized through various activities in the institutes from time to time.

G. Toll free Number:

UGC has set up Toll free No. 1800-111-656 for registration of grievances related to Women and sexual harassment.”

(OM No. 13-13/2019-U.5 dated 7.01.2020)

Reply of the Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare in their taken reply on the aforementioned recommendation stated as under:-

“The Department of Health Research and Indian Council of Medical Research have Internal Complaints Committees as per Sexual Harassment of Women at Workplace, Act, 2013. Wide publicity of this Act is ensured. Online grievance redressal mechanism including toll free number and acceptance of complaints is also being set up.”

(OM No. H.11016/03/2019-HR dated 27.12.2019)

Reply of the Ministry of Ayush

The Ministry of Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The Ministry of AYUSH sensitises its women employees about harassment issues in Headquarters, institutes and units through sensitisation programmes, periodical meetings, awareness camps/ lectures/ seminars; as well as addresses the grievances reported to women harassment cell on top priority. The details of the action taken by the National Institutes and Research Councils are as under:-

- a) The Internal Complaints Committee has been constituted in NIS, Chennai. Wide publicity has been given regarding zero tolerance to sexual harassment. Action under CCS(CCA) Rules has been initiated against one specific faculty member against whom complaints were received. The faculty member has also been divested of the charge of Head of Department in order to protect the interests of the affected women students.
- b) Recently, CCRH's Institutes/Units in Imphal (27.04.2019), Port Blair (20.04.2019), Hyderabad (02.05.2019), Chennai (30.04.2019), Agartala (29.04.2019), Noida (16.04.2019) and Tirupati (27.04.2019) held sexual harassment awareness programmes for their employees.
- c) CCRUM's Institutes/Units holds sexual harassment awareness programmes for their employees from time to time.
- d) Internal committee of Sexual harassment of women at work place has already been constituted in Central Council for Research in Siddha (CCRS) and till date there has been no complaint of sexual harassment in CCRS and its peripheral institutes / units. To sensitize the women at workplace, CCRS has been conducting awareness programmes.
- e) CCRAS is conducting workshops for creating awareness among the employees about different provisions of the 'Sexual harassment of women at workplace, 2013 Act' from time to time. During this financial year, one workshop for the sensitization of the Council's employees on "*Provision of the law pertaining to prevention prohibition and redressal of sexual harassment of women at work place*" was held on 27th June 2019 at CCRAS Hqrs, New Delhi.
- f) In IPGTRA, Jamnagar, a grievance cell has been formed to take care of internal complaints of employees but during last year no complaint has been registered. There is also

an anti- sexual harassment committee dealing with sexual harassments complaints, but here the institute feels pride to mention that no complaint has been received.

g) In AIIA, till now no case of sexual harassment of women researcher/students has been reported. To mitigate the chances of sexual harassment, the institute has constituted Prevention of Sexual Harassment of women Committee.

h) NIH Kolkata is having internal complaints committee headed by a women faculty to deal with "Sexual harassment of women at work place". Also, a self-defence training programme was conducted in the institute campus on 31.1.2019".

(O.M. No. H-11013/4/2019-CDN dated 9.08.2019)

CHAPTER III

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE REPLIES OF THE GOVERNMENT

-NIL-

CHAPTER IV

**OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT
HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION**

-NIL-

CHAPTER V

OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES

Access to Higher Education

Recommendation (Para Nos. 2(ii))

The Committee believe that education is an enlightening force and fosters the inner spirit of inquiry which is ennobling force, which is also a significant method of bringing back those sections of society which are beyond the social mainstream. The Committee believe that the Ministry should emphatically and at the earliest gather such data, analyze and work upon the findings to ensure that such aforesaid sections of the society are not left out. One of the methods, to engage the stake-holders is to develop a positive value-system towards the existing system of governance and the percolation of benefits emanating out of Higher Education with the bruised social psyche of people living in such areas.

The Committee are glad to note about the efforts made by the Rashtriya Uchchatar Shiksha Abhiyan(RUSA) as an overarching scheme, operated in mission mode for funding the state universities and colleges in order to achieve the aims of equity, access and excellence. The Committee have been informed that till date central assistance for creation of universities through a upgradation of Rama Devi Women Autonomous College, Bhubaneshwar and Jamshedpur Women's College into two universities has been approved by the project approval board (PAB) of RUSA. The Committee would recommend that the Ministry should actively persuade the various State Governments in opening up of various universities for equity, access and excellence and the number of universities opened should increase in a time bound manner.

The Committee are glad to note that there has been nomination of women in the IIT Council and a decision regarding increase of female enrolment in B.Tech programmes of IITs from the current 8% to 14%

in 2018-19 to 17% in 2019-20 and 20% in 2020-21 by creating supernumerary seats in the same manner as for the sanctioned seats which would lead to improvement of gender balance in IITs.

The Committee desire that the percentage of reservation for girls may be increased suitably to ensure that even in the face of any drop outs/ discontinuance, the annual pass out rate for women graduates increase substantially. The Committee feel that this would lead to greater representation of women in Research and Development at a later stage which would imbue a gender sensitive approach towards R&D activities.

The Committee are glad to note the effort taken by Indira Gandhi National Open University (IGNOU) in terms of their conscious efforts to reach out to women learners in remote and rural areas through special study centres for women which is 35 in number at present, establishment of the schools of gender and development studies in 2007 focusing upon achievement of gender justice and equity, creation of women and gender resource space and gender sensitization initiative having a multi-pronged spectrum of interventions including course/module/package design, development and delivery, research studies and skill development through gender training. The Committee recommend that the Ministry must actively implement efforts of this kind made by IGNOU in other distance-learning universities so that the every nook and corner of the country is reached with the enlightening forces of education and quest for women empowerment is able to achieve its cherished goals in tune with our constitutional aspirations. The Committee recommend that all the institutions under the Ministry of Science and Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of AYUSH work towards creating gender balance and intimate the Committee about efforts taken in the matter.

Reply of the Ministry of Science and Technology

The Ministry of Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“With reference to the recommendation that data should be gathered and analysed it is to be mentioned that, MHRD regularly conducts an all India Survey on Higher Education and publishes AISHE report. The recent AISHE report of 2017 provides a wide range of data regarding enrolment progression of women in higher education, gender parity, streams, etc. Such data is analyzed with gender perspective for formulation of new programmes.

A sizable section of women scientists remain away from mainstream science due to family responsibilities and take a break in career. Under the Women Scientists Scheme (WOS) of Department of Science and Technology (DST), opportunities for research are being provided to this group of women to bring them back into mainstream science.

Department of Science and Technology has started CURIE (Consolidation of University Research for Innovation and Excellence) programme in a top-down mode in order to provide better access of higher education to girls. Eight (8) women universities in the country have been provided support under CURIE Programme including the newly setup Rama Devi Women University, Bhubaneswar. Under this programme, support is given to strengthen the research infrastructure of Science, Technology, Engineering and Mathematics (STEM) departments in women universities.

During last five years, DBT has provided fellowship to 1685 (46.4%) women candidates under DBT-JRF/SRF Fellowship. Out of 3630 total candidates. Further, under the Biotech Industry Training Program DBT has provided industrial training 2132 (71.4%) women candidates in last 5 years out of total 2984 candidates.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Reply of the Ministry of Human Resource Development

The Ministry of Human Resource Development in their action taken reply on the aforementioned recommendation stated as under:-

“Under the Centrally Sponsored Scheme of Rashtriya Uchchatar Shiksha Abhiyan (RUSA), State Governments are encouraged to address the issues of equity, access and quality of higher education by seeking central support under the scheme. Inter alia, central assistance is provided for creation of Universities either through upgradation of existing autonomous colleges or through clustering of colleges.

Till date, central assistance for creation of Universities through (i) Upgradation of Rama Devi Women’s Autonomous College, Odisha & Jamshedpur Women’s College, Jharkhand and (ii) creation of Maharani Cluster University, Bengaluru through Clustering of Colleges have been approved under RUSA. For each of these Universities, an amount of Rs. 55 crores has been approved under the scheme including both central and State share.

Furthermore, under the scheme, various other Women’s Universities have been supported under other components such as infrastructure Grants to Universities and Grants for Equity Initiatives.

With a view to improving female enrolment in the B.Tech Programmes in IITs, a Committee under the chairmanship of Director, IIT-Mandi was constituted by the Joint Admission Board (JAB) to suggest suitable measures. The recommendations of the Committee were considered by the IIT Council in its 51st meeting held on 28.04.2017 and decided to increase female enrolment from the current 8% to 14% in 2018-19, 17% in 2019-20 and 20% in 2020-21 by creating supernumerary seats. Accordingly, IITs have created supernumerary posts for female enrolment for admission during 2018-19 and 2019-20. A copy of the extracts of the Joint Implementation Committee Report

JEE (Advance) 2018 may be seen at
<https://drive.google.com/file/d/12x1uG0BeGqO2r9OJi43Ag5YVAjF2alli/view>.

Based on the recommendation/ observation of the Committee, all the fourteen (14) State Open Universities (SOUs) have already been requested to take note of the desire of the Hon'ble Committee and arrange for taking similar steps as being taken by IGNOU to reach out to women learners in remote and rural areas.”

(OM No. 13-13/2019-U.5 dated 7.01.2020)

Reply of the Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare are silent on the reply.

Reply of the Ministry of Ayush

The Ministry of Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The Ministry of AYUSH through its five Research Councils and eleven (11) National Institutes has always encouraged gender balance. The data received from these institutions/councils provide a very bright picture as far as education of women is concerned. A summary of the report received from the Councils/ Institutes is as below:

- a) Institute for Post- graduate Teaching & Research in Ayurveda (IPGTRA) Jamnagar , has reported that during academic year 2018-19 out of 22 PhD scholars 12 (i.e. 54.54 %) are women & in post-graduation courses out of 48 students 33 (i.e. 68.75 %) are women.
- b) AIIA, New Delhi has reported that there are 75% female MD scholars in Ist year, 76.36 % female MD scholars in IInd year and 71.43% female MD scholars in IIIrd year.
- j) RAV, New Delhi has reported that more than 66% of the students are women.

- k) NIH Kolkata has reported that there are 58 % women candidates pursuing BHMS course out of total of 607 students. It has also enrolled 25 women candidates out of total 35 PG trainees this year which is 71 % approx.
- l) NEIAH, Shillong has admitted 78 female students out of 150 (52%) in BAMS course and 109 female students out of 150 (73%) in BHMS course.
- m) NIA, Jaipur has admitted 128 Female Post-Graduate Scholars out of 208 and 25 Female scholars in the Post-Doctoral course out of 56 during the last two years, which is 64% and 45% respectively.
- n) 05 female researchers of CCRH have pursued MD in Homoeopathy while employed.
- o) 03 female researchers of CCRUM have pursued MD / Ph.D while employed. Total of 38 women employees including Scientists are working in CCRUM that is 25.5 %.
- p) Out of total strength of 165 employees in CCRS, 75 are women employees. Of the total of 52 Scientist in CCRS, 32 are Women Scientists.”

(OM No. H-11013/4/2019-CDN dated 9.08.2019)

Achievement in Research and Development relating to Women's Health and scope for further prospects for Women in R & D relating to Health.

(Recommendation No. 10 (ii))

The Committee note that cancer incidents among women in India is estimated to increase from 110 per 1 lakh population to 190-260 per 1 lakh population by 2025. Across States there is a deterioration of key risk factors that contribute to cancer incidents among women and India is witnessing significantly adverse mortality rates for women specific cancers with cervical and breast cancer mortality rates being 1.6 to 1.7 times higher than mortality due to maternal causes. The challenge of high incidence is further compounded by late detection which has an adverse impact on cost of care and mortality. The Committee

are happy to hear from the Ministry that screening through adoption of established screening methods for cervical and oral cancers is being done. The Committee are glad to note about the path breaking research findings in new devices for detection of breast lumps in early stages and visual device with a light source (AV Maganivisualizer) for easy and better visualization of the uterine cervix as well as the oral cavity be put to commercial production so that it is utilized and health concerns of the maximum female population of the country can be taken care of. The Committee note that the states of Delhi and Punjab have been pioneers in rolling out of Human Pappiloma Virus (HPV) Vaccination. The Committee recommend for replicating the efforts of the States of Delhi and Punjab in rolling out of the HPV Vaccination Programme for girls aged 9 to 13 years in all other States as well. The Committee further recommend that the Ministry of Health and Family Welfare must collaborate with other State governments for effective implementation of this vaccination programme.

Reply of the Ministry of Health and Family Welfare

The Reply of the Ministry of Health and Family Welfare is silent on the reply

Recommendation (Para No. 12 (i))

Miscellaneous issues

Need for strengthening the prospects of Women researchers with special needs:

The Committee note that the initiatives are needed to ensure that women researchers with special needs are encouraged and their creative capabilities harnessed in the research and development sector. The Committee note that no specific programmes for women researchers with special needs has been created. The Committee further desired to know about the best international practices with respect to women researchers with special needs to be suitably incorporated in the KIRAN programme. The Committee are surprised to note that in an age of growing movement towards equality and exercise of compassion

towards the weaker and the vulnerable sections of the society, the Ministry is lacking in an emphatic approach towards these sections of society. Moreover, in the backdrop of the fact that global interconnectedness and emulation of the best international practices to involve women facing vulnerability and have opportunity to manifest the creative potential in the women, the Committee firmly recommend that in all the future Research Opportunity, women with special needs must be duly considered and empowerment of women by the creative and potent tool of Research and Development be bolstered to create an enabling environment for every kind of women to involve in the Research and Development opportunities. The Committee also recommend that the Ministry of Science and Technology, Ministry of HRD, Ministry of Health and Family Welfare and Ministry of AYUSH conduct a nationwide survey based on international benchmarks to ascertain the presence of a disabled friendly environment in research establishments under their jurisdiction. The Committee would like to be apprised of the action taken in the matter by all the ministries at the earliest.

Reply of the Ministry of Science and Technology

The Ministry Science and Technology in their action taken reply on the aforementioned recommendation stated as under:-

“DST has already implemented the government policy for facilitating a differently abled friendly environment in all its autonomous scientific establishments.

The Department appreciates the suggestion of encouraging participation of women researchers with special needs. DST is sensitive to needs of women researcher with special need. However, DST being a funding agency can at best ensure that women with special needs are duly considered in the scheme as their actual place of work is generally universities or laboratories.

Department of Biotechnology (DBT) is implementing Biotechnology Career Advancement and Re-orientation Programme (BioCARE) for women scientists. The purpose of the scheme is to build capacities for women scientists employed fulltime in Universities and small research laboratories or unemployed women scientists after a career break so as to help them undertake independent R&D projects.

DBT autonomous institutions have been following the guidelines led down by Government of India in providing equal opportunities and facilitating women with special need. The institutions have taken several steps to facilitate women with special need viz. establishment of crèche / day care facility installation of lift, disabled friendly toilet, ramp with handrails etc.”

(OM No. H-11013/6/2019-PU dated 20.06.2019)

Reply of the Ministry of Human Resource Development

The Ministry of Human Resource Development are Silent on the reply.

(OM No. 13-13/2019-U.5 dated 7.01.2020)

Reply of the Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare in their taken reply on the aforementioned recommendation stated as under:-

“As informed in reply to para 9 (ii), the research projects are awarded on the basis of scientific soundness and merits of the research proposal and the women with special needs are given equal opportunity. However, ICMR has informed that it would give further impetus to engage them in future in consultation with M/o Social Justice & Empowerment.”

Reply of the Ministry of Ayush

The Ministry of Ayush in their action taken reply on the aforementioned recommendation stated as under:-

“The M/o AYUSH appreciates that special provisions are required for women researchers with special needs for which it is making the buildings of research institute/units and national institutes disabled friendly. The following actions have been taken in the research councils and national institutes:-

- a) The buildings of CCRH Headquarters and its institutes/units in Noida, Gudivada, Agartala, Kolkata, Hyderabad, Tirupati, Ranchi, Patna and Puducherry are now disabled friendly.
- b) The buildings of CCRUM Headquarters and its institutes/units in Hyderabad, Lucknow, Chennai, Patna, and Bhadrak are now disabled friendly.
- c) NIN Pune in its upcoming extension of NISARG GRAM project has made special provision for women researchers with special need.
- d) In AIIA, the establishment of Crèche/Day care facility is under progress.
- e) NIH Kolkata is striving for disabled friendly environment having lifts, ramps, washrooms etc.”

(OM No. H.11016/03/2019-HR dated 27.12.2019)

COMMENTS OF THE COMMITTEE

(Please see para 44 of Chapter I of the Committee)

NEW DELHI;
3rd March, 2020
13th Phalgun, 1942 (Saka)

DR. HEENA VIJAYKUMAR GAVIT,
CHAIRPERSON,
COMMITTEE ON EMPOWERMENT WOMEN

APPENDIX I

COMMITTEE ON EMPOWERMENT OF WOMEN (2019-2020)

MINUTES OF THE SEVENTH SITTING OF THE COMMITTEE HELD ON TUESDAY, 3rd MARCH, 2020

The Committee sat from 1500 hrs. to 1730 hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Dr. Heena Vijaykumar Gavit - **Chairperson**

MEMBERS

LOK SABHA

2. Smt. Locket Chatterjee
3. Smt. Sangeeta Kumari Singh Deo
4. Smt. Annpurna Devi
5. Km. Shobha Karandlaje
6. Smt. Raksha Nikhil Khadse
7. Smt. Poonamben Hematbhai Maadam
8. Smt. Jyotsna Charandas Mahant
9. Smt. Jaskaur Meena
10. Smt. Shardaben Anilbhai Patel
11. Smt. Riti Pathak
12. Smt. Sarmistha Sethi
13. Smt. Geetha Viswanath Vanga

RAJYA SABHA

14. Smt. Vandana Chavan
15. Smt. Sarojini Hembram
16. Smt. Kahkashan Perween
17. Smt. Vjjila Sathyananth
18. Smt. Chhaya Verma

SECRETARIAT

1. Smt. Kalpana Sharma - Additional Secretary
2. Shri Ajay Kumar Garg - Director
3. Smt. Reena Gopalakrishnan - Additional Director

2. At the outset, the Chairperson welcomed the Members of the Committee to the sitting of the Committee.

3. The Committee then took up the following draft Action Taken Reports for consideration:

- (i) Draft Action Taken Report on the subject 'Yoga and Sports facilities for Women'.
- (ii) Draft Action Taken Report on the subject 'Working Conditions of women Teachers in Schools'.
- (iii) Draft Action Taken Report on the subject 'Higher Education Research and Development : Prospects for Women'

4. After some deliberations, the Committee adopted the Draft Report without any modification and authorized the Chairperson to finalize the Draft Reports and present them to both the Houses of Parliament.

5. *****

6. *****

The Committee then adjourned.

******Matters not related to this Report.*

APPENDIX II

(Vide para 4 of the Introduction)

ANALYSIS OF ACTION TAKEN BY GOVERNMENT ON THE OBSERVATIONS/RECOMMENDATIONS CONTAINED IN THE SIXTEENTH REPORT OF THE COMMITTEE ON EMPOWERMENT OF WOMEN (2018-2019) (SIXTEENTH LOK SABHA) ON 'HIGHER EDUCATION AND RESEARCH AND DEVELOPMENT - PROSEPECTS FOR WOMEN'

(i)	Total No. of Recommendations:	15
(ii)	Observations/Recommendations which have been accepted by the Government: Recommendation Para Nos. 2.1(i), 3, 4, 5, 6, 7, 8, 9(i), 9(ii), 10 (i), 11 and 12(ii)	Total: 12 Percentage: 80%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the replies of the Government: Recommendation Para Nos. NIL	Total: 00 Percentage: 0%
(iv)	Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and which require reiteration Recommendation Para Nos. Nil	Total: 00 Percentage: 0%
(v)	Observations/Recommendations in respect of which Government have furnished interim replies Recommendation Para Nos. 2(ii), 10(ii) and 12(i)	Total: 03 Percentage: 20%