Report of the Working Group on AYUSH for the 12th Five-Year Plan (2012-17)

WG 7 : AYUSH

No. 2(6)2010-H&FW Government of India Planning Commission

Yojana Bhavan, Sansad Marg New Delhi – 110001

Dated 24th June 2011

OFFICE MEMORANDUM

Subject: Constitution of working group on AYUSH for the Twelfth Five Year Plan (2012-2017)

With a view to formulate the Twelfth Five Year Plan (2012-2017) for the Health Sector, it has been decided to constitute a Working Group on AYUSH under the Chairmanship of Shri Anil Kumar, Secretary, Department of AYUSH, Government of India.

The composition and the terms of reference of the Working group would be as follows:

1.	Shri Anil Kumar, Secretary, Department of AYUSH, Government of India	Chairperson		
2.	Dr. R.H. Singh, Prof. Emeritus, Banaras Hindu University, Varanasi	Member		
3.	Dr. Bhushan Patwardhan, Director, Institute of Ayurveda and Integrative Medicine, Foundation for Revitalization of Local Health Tradition (FRLHT), Bangalore & Vice-Chancellor, Symbiosis International University, Pune	Member		
4.	Shri Ranjit Roy Chaudhary, Ex- DDG, Indian Council of Medical Research (ICMR), New Delhi	Member		
5.	Dr. G.P. Dubey, Retd. Dean, Faculty of Ayurveda, Banaras Hindu University, Varanasi	Member		
Homoeopathy				
6.	.Dr.V.K.Gupta, Former Principal, Nehru Homoeopathic Medical College, New Delhi.	Member		

7.	Dr.Eswara Das, Former Director, National Institute of Homoeopathy, New Delhi.	Member
8.	Dr Issac Mathai, Soukya International Holistic Health Center, Bangalore.	Member
Unani		
9.	Hakim Khaleefatullah, Vice-President, CCIM, Chennai,	Member
10.	Dr. Mohammad Khalid Siddiqui, Retired Director General, CCRUM, Faridabad-	Member
Ayurvec	la	
11.	Shri Ashok D.B.Vaidya, Research Director, Kasturba Health Society, ICMR Advanced Centre of Reverse PharmacologyMumbai	Member
12.	Dr. C.Katiyar,Head, Health Care Research, Dabur R & D Center, , Sahibabad , Gaziabiad	Member
13.	Dr. M.S.Baghel, Director, IPGT&RA, Jamnagar, Institute for Post Graduate Teaching & Research in Ayurveda, Gujarat Ayurved University, JamnagarGujarat	Member
Siddha		1
14.	Dr.T.Thirunarayanan, Director, Centre for Traditional Medicine and Research, Chennai	Member
15.	Dr. G. Sivaraman, Director, Arogya Health CareChennai	Member
Sowa-R	igpa	I
16.	Prof. Geshe Ngawang Samten (Vice Chancellor), Central Institute of Higher Tibetan Studies (Deemed University), Sarnath, Varanasi	Member
17.	Dr. P. Gurmet ,Research Officer Incharge Sowa Rigpa Research Centre, Leh-194101	Member
Director	Generals/Directors of National Institutes	1
18.	19. Dr. Ramesh Babu Devalla, Director General, Central Council for Research in Ayurveda & Siddha, New Delhi	Member
20.	21. Dr. Alok Kumar, Director General Incharge, Central Council for Research in Homoeopathy, New Delhi	Member
22.	23. Prof. Shakir Jamil, Director General, Central Council for Research in Unani Medicine, New Delhi	Member

Dr. B.T.C.Murthy, Director, Central Council for Research in Yoga & Naturopathy, Janakpuri, New Delhi	Member
Dr. I. Basavaraddi, Director, Morarji Desai National Institute of Yoga, New Delhi	Member
Dr.V.V.Prasad, Director, Rashtriya Ayurved Vidyapeeth, New Delhi	Member
Smt. S.K.Baijal, Director (Health), Planning Commission	Member
Dr. Rakesh Sarwal, Joint Secretary, Department of AYUSH, New Delhi	Member
Dr. D.D.Sharma, Joint Secretary, Department of AYUSH, New Delhi	Member Secretary

Terms of Reference

- 1. To review the coverage for mainstreaming of AYUSH under NRHM and its areas of strengths in the delivery of health care.
- 2. To review infrastructure of existing AYUSH hospitals & Dispensaries in Govt. Sector / Public Sector.
- 3. To review availability of trained paramedical staff like AYUSH nurses, Pharmacists, Panchkarma masseurs etc.
- 4. To review fast depletion of medicinal plan resources in forest and wild areas: address issue of non-availability of good quality of raw materials
- 5. To review lacks of support price of support for Medicinal Plants through appropriate policy
- 6. To review the restructuring and strengthening the Research Councils and National Research Institute
- 7. To review infrastructure and training institutes for Nursing Pharmacists & other paramedics in AYUSH
- 8. To review measures for the generation of awareness within the country and outside the country.

- 9. To review the progress achieved in the 11th Plan in the areas of infrastructure, production of high quality drugs, co-locate facilities under NRHM, quality of education and research & development
- 10. To project financial physical requirements for implementation of these programmes during the 12th Five Year Plan.
- 11. To deliberate and give recommendations on any other matter relevant to the topic.
- 12. Deliberate and give recommendations on any other matter relevant to the topic.
- 13. The Chairman may constitute various Specialist Groups/ Sub-groups/ task forces etc. as considered necessary and co-opt other members to the Working Group for specific inputs.
- 14. Working Group will keep in focus the Approach paper to the 12th Five Year Plan and monitor able goals, while making recommendations.
- 15. Efforts must be made to co-opt members from weaker sections especially Scheduled Castes, Scheduled Tribes and minorities working at the field level.
- 16. The expenditure towards TA/DA in connection with the meetings of the Working group in respect of the official members will be borne by their respective Ministry / Department. The expenditure towards TA/DA of the non-official Working group members would be met by the Planning Commission as admissible to the class 1 officers of the Government of India.
- 17. The Working group would submit its draft report by 31st July, 2011and final report by 31st August, 2011.

(Ambrish Kumar) Adviser (Health)

Copy to:

- 1. Chairman, all Members, Member Secretary of the Working Group
- 2. PS to Deputy Chairman, Planning Commission
- 3. PS to Minister of State (Planning)
- 4. PS to all Members, Planning Commission
- 5. PS to Member Secretary, Planning Commission
- 6. All Principal Advisers / Sr. Advisers / Advisers / HODs, Planning Commission
- 7. Director (PC), Planning Commission
- 8. Administration (General I) and (General II), Planning Commission
- 10. Accounts I Branch, Planning Commission
- 11. Information Officer, Planning Commission
- 12. Library, Planning Commission

(Ambrish Kumar) Adviser (Health)

Report of Working Group on AYUSH for 12th Five-Year Plan (2012-17)

Department of AYUSH Ministry of Health & Family Welfare Government of India

August 2011

Report of the Working Group on AYUSH for 12th Five-Year Plan

Preamble

The strategic role of AYUSH to meet health needs as part of medical pluralism was visualized at the beginning of 11th Plan and has been found to be equally relevant while formulating the 12th Plan on AYUSH. Accordingly, it is emphasized in the discussion note received from the Planning Commission to evolve interventions and innovations that could help realization of AYUSH potential with integrative approaches in health care. As "better health is not only about curative care but also about better prevention", the need of effective contribution from AYUSH systems, which are by and large preventive and promotive health systems, is thought of with strategic interventions and programmatic utilization of AYUSH among communities at national and global levels.

With the perpetual growth of demand of improvement in various aspects of AYUSH, Government response in allocating financial outlay for AYUSH has grown phenomenally over the plan periods. In the 11th Five year Plan (2007-12) it is to the tune of Rs. 3988 crore, which is the highest ever since the Dept. of AYUSH came in to being in 1995. Through various Centrally Sponsored and Central Sector Schemes implemented during the last three Plans, a lot of financial support has been provided to AYUSH sector for strengthening of education & industrial infrastructure, capacity building of institutions & workforce, quality control & strengthening of regulatory mechanism and awareness building. These schemes appear to have succeeded in bridging the gaps to certain extent and need to be continued in 12th Plan to build up marked quality difference, outreach and outcomes in strengthening the mutually inclusive growth of various AYUSH facets for health benefits of the people. Adequate implementation of the schemes, predominantly on account of huge size and needs of the AYUSH sector and limitations of funding provisions, has to be ensured to achieve value outcomes with effective strategies and monitoring mechanisms.

In the emerging scenario of lifestyle and psychosomatic diseases aiming at more and more people to adopt AYUSH way of living and health care, it is highly desirable for the Government to devise the initiatives for 12th Plan in such a way as are structured with focused objectives & implementation plans for specific outcomes and are supported with effective mechanisms for appraisal, screening, monitoring and evaluation of projects with regard to their likely impact in the AYUSH sector on the basis of specified indicators and clearly articulated transparent criteria. While doing so the pertinent point to note is that image & utility of AYUSH sector is significantly influenced by private and voluntary sector initiatives particularly in the wake of the fact that about 75% of the AYUSH institutes belong to private players and the industry & other non-governmental institutions has a bigger role in AYUSH growth & development. Moreover, peoples' out of pocket spending on health also amounts to more than 70% of the total health expenditure. It would, therefore, be befitting to allocate significant proportion of Plan outlay for supporting activities, creativities and innovations in private sector, preferably through PPP mode.

In view of the current needs of AYUSH sector and catapult it in to a vibrant area for government investments, it is considered that the hallmark of supporting AYSUH activities in 12th Plan should be based on Health System approach, which aims at developing effective regulation & governance, financing, human resources, service delivery, health technology and health information. AYUSH health systems being important component of the health system are equally responsible to meet the societal health needs, their functions need to be mapped,

strengths assessed and weaknesses addressed for improved implementation and monitoring & evaluation of goals.

II. Working Group and Terms of Reference

The details of the Working Group on AYUSH set up by the Planning Commission and its Terms of Reference are annexed.

III. Strategic direction for the 12th Plan

India has a strong foundation and a rich heritage of AYUSH systems which are widely recognised for their holistic approach to health and capability for meeting emerging health challenges. Medical pluralism in the country provides people options to avail treatments of their choice and help bridging the gaps in health care. Approach Paper of Planning Commission for the 12th Plan envisages that better health is not only about curative care but also about better prevention from diseases. Preventive health care and health promotion are the fortes with which AYUSH systems were visualised to operate at the start of 11th Plan and still hold equal relevance while the 12th Plan (2012-2017) is being formulated. Strategic interventions and programs, therefore, need to be planned keeping in mind the health sector trends and accordingly equipping the AYUSH sector to achieve tangible health outcomes.

The mandate of AYUSH Department encompasses seven key areas of activity and intervention, namely AYUSH services, Medicinal Plants, Research & Development, Human Resource Development, International Collaboration, IEC and Drug administration. The prime functions of the Department are aimed at improving health delivery mechanism in terms of quality & outreach, enforcement of educational standards, quality assurance & effective regulation of drugs, fostering collaborative & interdisciplinary AYUSH research of contemporary relevance, awareness building both within and outside the country, mainstreaming of AYUSH in health delivery system and development of properly trained and professionally competent AYUSH workforce.

Department of AYUSH intends to ensure that more and more people adopt AYUSH way of healthy living, disease prevention and cure of diseases and AYUSH systems are positioned with optimal quality & standards of education, research and health care services. Thrust is proposed to be given on the following areas in the 12th Plan-

- i) Availability of AYUSH services in 100% of districts through NABH accredited hospitals;
- ii) Improving quality of education & training and developing Centres of Excellence in government and private sectors;
- iii) Promoting quality research to validate the efficacy and safety of AYUSH remedies;
- iv) Ensuring availability and conservation of medicinal plants;
- v) Accelerating Pharmacopeial work;

- vi) Ensuring availability of quality drugs;
- vii) Positioning AYUSH national institutes as leaders in SAARC region;
- viii) Propagation of AYUSH for global acceptance as systems of medicine

It is, therefore, carefully attempted to specify the scale for the implementation of proposed schemes compatible with the expected results and targeted deliverables and mobilize resources accordingly towards niche areas that demand proportionately adequate chunk of allocation, detailed resource projection is provided in **Annexure-I**

IV. Justification for enhancing allocation under Ongoing Schemes

The ongoing schemes of 11th Plan comprise of eleven Central Sector Schemes with allocation of Rs. 2053 crore and three Centrally Sponsored Schemes with allocation of Rs. 1935 crore. The total allocation amounted to Rs. 3988 crore. The 38th Report of the Public Accounts Committee 2006-07) has seriously pointed out that the share of AYUSH in the total health plan at the central level has been only 2% in-spite of the policy pronouncement of raising AYUSH share to 10% with designated growth of 5% in every Five-Year Plan. Inadequate allocation for AYUSH has been considered by PAC the main reason for not achieving the envisaged objectives. Accordingly, the 12th Plan allocation for Central and Centrally Sponsored Schemes is proposed to be enhanced almost by 7 times and 17 times respectively, including the transfer of Rs. 10000 crore from NRHM Flexipool for implementation of state AYUSH PIPs. All this has led to total projected allocation of Rs.47535.55 crore (about 12 time-hike from 11th Plan allocation) to pave for effective implementation of projects in strategic thrust areas identified above and to step up the process of mainstreaming of AYUSH. Necessary updating and revision of the norms, without making any structural change or change in the funding pattern of the schemes, will be done to ensure that the objectives of the schemes are adequately met, project proposals in targeted thrust areas are properly funded and the outcomes happen to be of long term value for the AYUSH sector.

(A) Central Sector Schemes

(1) System strengthening: The ongoing six schemes namely, Strengthening of Department of AYUSH, Statutory Institutions, Hospitals & Dispensaries, Strengthening of Pharmacopoeial Laboratories, IEC and AYUSH & Public Health function under the head of "System Strengthening". In the 12th Plan (2012-17) a provision of Rs. 1409 crore has been proposed against the 11th Plan outlay of Rs. 282.75 crore. Sub-scheme wise details and justification are as under-

a) Strengthening of Department of AYUSH

This scheme in the 11th Plan has allocation of Rs. 47 Crore for engagement & maintenance of Secretariat Social Services in the Department of AYUSH to run the administration and for supporting Pharmacopeia Committees of Ayurveda, Siddha and Unani and strengthening of Pharmacopeia Commission of Indian Medicine.

The major achievements during the 11th Plan are-

- Three national institutes and a Pharmacopoeia Commission of Indian Medicine have been/are being set up.
- Publication of pharmacopeial standards and Standard Operating Procedures (SOPs) of 152 Ayurvedic formulations.
- Publication of pharmacopeial monographs of 101 single plant drugs and 21 minerals.
- Publication of macro & microscopic and TLC atlases of 172 drugs.
- Development of eight community herbal monographs in the format given by European Medicines Evaluation Agency (EMEA) for submission to EU.

Midterm appraisal of the scheme implementation pointed out the need to adequately strengthen the administrative framework and construction of a separate building for the Deptt. of AYUSH and to accelerate the work of laying down pharmacopieal standards of Ayurveda, Siddha and Unani drugs through Pharrmacopeia Commission.

The proposals for 12th Plan with needed allocation under this scheme aim at-

- Strengthening Secretariat Social Services in the Department of AYUSH by engaging need-based more technical & administrative staff and filling up the vacant posts to facilitate smooth disposal of administrative & technical work and hiring/construction of new building for the Department in consideration of its enhanced mandate, responsibilities and sphere of interface and administration (Rs. 100 Cr.).
- Augmenting pharmacopeia work to develop 1000 monographs and strengthening Pharmacopeia Commission & associated laboratories to accelerate the work of standardization & quality parameters of ASU drugs as per global requirements & acceptability, to take up development of monographs of such medicinal plants as are widely used in folklore/tribal medicine but not documented in ASU literature and to work on the lines of other Pharmacopoiea Commissions of the world (Rs. 50 crore).
- Providing support to build up the initiative of safety monitoring of Ayurveda, Siddha and Unani drugs under the pharmacovigilance system, which was introduced in the country during the 11th Plan period, by designating one National Pharmacovigilance Resource Centre, 8 regional centres and 30 peripheral centres to develop the culture of reporting adverse drug reactions of ASU drugs (Rs. 15 crore).
- Setting up National AYUSH Library & Archives under the Department of AYUSH for collecting, showcasing and dissemination of AYUSH literary resources & materials and publication of AYUSH newsletter, journals etc. Rs. 50 cr.

The increased allocation of Rs. 215 crore proposed for 12th Plan amounts to 4.57 times hike over the 11th Plan allocation.

b) Statutory Institutions

The sub-scheme '**Statutory Institutions**' in the 11th Plan comprise of three components under which provision of Rs. 2.95 Crore is made for granting financial support to the Regulatory Bodies- Central Council of Indian Medicine (CCIM), Central Council of Homeopathy (CCH) and Pharmacy Council of Indian Medicine & Homeopathy. The salient achievements during 11th Plan are-

- Revision of course curricula.
- Publication of Central Register of Homeopathy
- Organisation of twelve workshops on quality education issues and revision of course curricula including the one for principles of postgraduate colleges.

It is proposed to continue the first two components of the scheme in the 12th Plan with almost 33% enhancement of the allocation amounting to Rs. 4.00 crore only and to delete the third component of setting up Central Pharmacy Council for Indian Medicine & Homeopathy, which could not materialize in the 11th Plan. The projected allocation is required to match the need of strengthening infrastructural facilities and developmental activities in the Regulatory Bodies, whose sphere of regulating education and practice of Ayurveda, Siddha, Unani and Homeopathy and updating of central registers of practitioners has increased significantly after the opening of new colleges and increased turnover of practitioners.

c) Hospitals & Dispensaries

Under this scheme four components are provided in the 11th Plan- (i) **All India Institute of Ayurveda (AllA), New Delhi** (Rs. 150 Crore), (ii) **CGHS expansion of AYUSH dispensaries** (Rs. 6.30 Crore), (iii) **Advanced Ayurvedic Centre for Mental Health in NIMHANS, Bangalore** (nil allocation) and (iv) **CGHS Ayurveda Hospital, New Delhi** (Rs. 6.50 Crore). 11th Plan allocation for them amounts to Rs. 162.80 crore excluding that of the third component as it ceased to be supported from 10th Plan onwards.

In the 11th Plan establishment of AIIA has been taken up vigorously, construction of its buildings started since 2009-10, services of Director, personal staff and Clinical Consultants have been engaged, OPD facility started and several posts got created. It was noted that the AYUSH dispensaries opened in CGHS could not be made functional due to shortage of Medical Officers & Paramedical staff and non-creation of posts as well. Mid-term appraisal found the AIIA project on track and recommended necessary action for creation of posts on priority basis for AYUSH dispensaries in CGHS as done for NRHM.

Allocation sought for this scheme in the 12th Plan amounts to Rs. 450 crore, which would be used for-

- AllA to complete the remaining capital works and make the institute functional in academic and clinical departments (Rs. 300 Crore).
- Taking up expansion and strengthening of AYUSH under CGHS by creating dedicated administrative set up with provision of Additional Director, CGHS

(AYUSH), opening new dispensaries/hospitals in various CGHS-covered locations and up-gradation of existing CGHS Ayurveda Hospital, New Delhi (Rs. 150 cr.).

The third component of the scheme- Advanced Ayurvedic Centre for Mental Health in NIMHANS being part of CCRAS will be supported in 12th Plan through the relevant scheme and the same will be scratched from the instant scheme.

d) Strengthening of Pharmacopoieal Laboratories

This scheme is meant for supporting Pharmacopoeial Laboratory of Indian Medicine (PLIM)-Ghaziabad, Homeopathic Pharmacopoeia Laboratory (HPL) - Ghaziabad and Public Sector Drug Manufacturing Undertaking–Indian Medicines Pharmaceutical Corporation Limited (IMPCL), Mohan (Uttrakhand). The 11th Plan allocation for the scheme is to the tune of Rs. 25 crore and it is intended to continue all the three components in 12th Plan with enhanced allocation of Rs 105 crore (4.2 times hike) to augment standards development, quality control and production of ASU&H drugs with standard quality.

11th Plan achievements of significance until March 2011 include-

- Development of identity and quality standards of 256 ASU & 92 homeopathic drugs, quality testing of 1342 ASU and 3709 homeopathic samples and conduct of 31 workshops/training programs by the Pharmacopoeia Laboratories.
- Implementation of detailed capacity enhancement project of IMPCL worth Rs. 33.86 crore.

Midterm appraisal of the scheme in 11th Plan realised the need to accelerate the work of laying down pharmacopoieal standards & quality control and recommended for IMPCL additional share capital to facilitate modernization and introduction of new technology to enhance quality production of drugs and turnover in business.

Accordingly, allocation of Rs. 105 crore is sought in the 12th Plan under the scheme with provision of Rs. 50 crore for PLIM, Rs 5.00 crore for HPL and Rs. 50 crore for IMPCL to facilitate achievement of higher targets set for standardization & quality testing of drugs and enhance the production capacity of IMPCL to meet with entrepreneurship approach the increased supply requirements of the states for Ayurveda and Unani medicines under NRHM.

e) Information. Education and Communication (IEC)

The scheme on IEC provides for awareness building and public education about the AYUSH systems and their potential strength areas. It avails allocation of Rs. 25 crore only in the 11th Plan, with which Department of AYUSH has been able to organise/support/participate in Arogya fairs and health exhibitions and launch multimedia campaigns for popularisation of AYUSH. The achievements include-

• 30 National and State level Arogya melas and 23 multi-media campaigns on individual and collective strength areas of AYUSH.

 Development and nationwide dissemination of publicity materials in different languages.

During the mid-term appraisal of the scheme implementation in 11th Plan, it was decided to increase the funding pattern for state Arogyas and expand the schemedomain by collaborating with States in carrying out IEC activities including setting up of IEC cells and supporting preparation & translation of publicity materials/documentaries/short films in different languages. Concept of developing AYUSH cities, where quality AYUSH facilities exist, as AYUSH destinations by providing financial support to strengthen the available infrastructure was also emphasized.

In view of the need for developing IEC cells and awareness-building initiatives in collaboration with the states and to introduce AYUSH elements in school curricula & health program, for preparation of customised AYUSH information materials for mass distribution and for organising annual interactive meets with scientists and medical fraternity for propagation of AYUSH, **it is proposed to have an allocation of Rs. 300 crore in the 12th Plan**. The projected allocation amounts 12 times more from the corresponding 11th plan allocation to meet the costs of the anticipated volume of IEC work with diverse range of advocacy activities. Engaging a professional agency on specific terms of reference and targets for strategizing, planning and coordination of IEC activities and development of advocacy materials is also intended under this scheme.

f) AYUSH and Public Health

This scheme is aimed at supporting innovative proposals of government and non-government organisations to promote AYUSH interventions in public health care and encourage AYUSH practitioners in taking up public health programs on project-basis at district, taluka or block level. 11th Plan provided allocation of Rs. 20 crore for such projects. 28 projects have been supported through scheme till March 2011 and 10 projects are targeted in 2011-2011.

In order to support more such projects in the 12th Plan with focused deliverables and for exploring and implementing strategic AYUSH interventions of public health importance through the relevant public health programs/public health organisations, **a** scaled up allocation of Rs 335 crore is proposed for the 12th Plan. The targeted outreach, number of proposals and pilot projects with AYUSH interventions will be determined accordingly to have specific health coverage & outcomes among the communities like for food supplementation for malnutrition management, anaemia control, RCH services, AYUSH-based public health education etc.

It is intended under this scheme to bring about two specific interventions-'AYUSH Gram' and 'AYUSH Telemedicine' in the 12th Plan for expanding the access to AYUSH health care and facilitate people for adopting AYUSH-based lifestyle for healthy living and disease-prevention. The funding for these purposes is in-built in the proposed allocation of Rs. Rs 335 crore and concept details are given in subsequent pages under the head "New Components/Schemes".

(2) Educational Institutions: Twelve sub-schemes fall under the head 'Educational Institutions' and these are meant to support the eleven institutions working under the

administrative control of Department of AYUSH and for development of AYUSH Centres of Excellence in non-governmental/private sector in the area of AYUSH education, research, drug development, folk medicine etc. Amount of Rs. 100 cr. was allocated for these schemes in the 11th Plan. Sub-scheme-wise present allocation and achievements in the 11th Plan period are reported as under-

- i) IPGTRA, Jamnagar (Rs. 10 crore): 179 postgraduates and 68 Ph.Ds of Ayurveda passed out, organised 21 health check-up camps for school children, 42 medical camps, 8 workshops, 36 CME/Re-orientation Training programs and 25 pharmacovigilance trainings, under consideration to be designated as WHO Collaborating Centre for Traditional Medicine.
- ii) **NIA, Jaipur** (Rs. 49.18 crore): Total turnover of 318 graduates, 332 postgraduates, 33 Ph.Ds and 110 diploma holders, Ayurvedic treatment provided to 1638330 patients in the OPD and 165977 patients hospitalised, organised 115 mobile camps, Panchakarma facilities expanded,
- iii) **RAV, New Delhi** (Rs. 5 crore): Training of 717 Ayurveda students under *Guru-Shishya Parampara*, 7 workshops, 10 publications and nationwide implementation & monitoring of CME/Re-orientation Training Programs.
- iv) **NIS, Chennai** (Rs 20 crore): 168 scholars admitted for post-graduation in Siddha, 13.54 outdoor patients and 1.36 lakh indoor patients given Siddha treatment.
- NIH, Kolkata (Rs. 45 crore): 258 graduates & 81 postgraduates of Homeopathy passed out, three PG departments added, 20 CME/ROTPs conducted, 9.76 lakh outdoor patients and 5297 indoor patients treated with homeopathy, hospital's bed capacity increased, 33 posts created
- vi) **NIUM, Bangalore** (Rs. 25 crore): 106 scholars admitted for post-graduation in Unani Medicine, Unani treatment of 1.81 lakh outdoor patients and 39547 indoor patients, 10 CME/Re-orientation Training programs.
- vii) MDNIY, New Delhi (Rs. 20 crore): 413 students admitted for diploma course in Yoga Science, Diploma Course for medicos started, conducted certificate course for 9 batches, 42 Foundation courses, 230 camps, 5 orientation training programs, started school health program in 385 districts and under consideration for the designation of WHO Collaborating Centre in Traditional Medicine.
- viii) **NIN, Pune** (Rs. 13.5 crore): 5963 Naturopathy programs, 956 treatment cum awareness programs, 16 Re-orientation training programs, 9240 Yoga training programs and 5 food fairs conducted, 1.97 lakh patients attended institute's OPD for naturopathic treatment.
- ix) **NEIAH, Shillong** (Rs. 81 crore): Cabinet approval taken, Consultant for project implementation appointed, Director and essential staff appointed, OPD services and construction work started.

- x) **NEIFM, Passighat** (Rs. 41 crore): Cabinet approval taken, Project Management Consultant appointed and Rules-Regulations & Bye-laws are being finalised, construction of buildings about to start.
- xi) **Centres of Excellence** (Rs. 100 crore): 30 projects for upgrading infrastructure & functioning of private AYUSH centres supported.

These schemes except Vishwayatan Yogashram, New Delhi will be continued in the 12th Plan and it is intended to add up the following activities with projected allocation for each-

- up-gradation of National Institutes with modernised capital works, scientific • equipment & machinery and IT gadgets for strengthening of hospitals to and laboratories and appointment of more technical and non-technical staff required for load-IPGTRA, increased work Jamnagar (Rs. 92 crore), NIA, Jaipur (Rs. 128 crore), NIS, Chennai (Rs. 116 crore), NIH, Kolkata (Rs. 110 crore), NIUM, Bangalore(Rs. 92 crore), NIN, Pune (Rs. 50 crore), NEIAH, Shillong (Rs. 100 crore), NEIFM, Passighat (Rs. 80 crore) and up-gradation of Rashtriya Ayurved Vidyapeeth as National Training Institute (like NIHFW) to oversee and implement all AYUSH-related trainings, CME and capacity building programs (Rs. 218 crore).
- Strengthening Yoga hospital & laboratory of Morarji Desai National Institute of Yoga, and setting up under its aegis 400 District Yoga Wellness Centres and continuation of existing 200 District Yoga Centres (Rs. 178.05 crore).
- Development of non-governmental Centres of Excellence in the states by providing support to enable well-equipped facilities for scientific learning, clinical research, drug development, instrumentation and technology development (Rs. 3262.50 crore).
- Development of referral hospitals in National Institutes, details given under the head 'New Components/Schemes (Rs. 820 crore)

The total plan outlay of Rs. 5246.55 crore for the above activities is sought accordingly, which is 12.78 times higher than the 11th plan provision of Rs. 410.68 crore.

(3) Research & Development including Medicinal Plants

Under this head ten sub-schemes mainly pertaining to AYUSH research & studies and medicinal plants are provided with total outlay of Rs. 719.57 crore in the 11th Plan. Central AYUSH Research Councils and National Medicinal Plants Board (NMPB) are funded through this scheme. Individual sub-scheme wise allocation and achievements in 11th Plan are as under -

- a) Central Council for Research in Ayurveda & Siddha: 23 clinical research projects, safety studies on 5 drugs, 154 villages covered under Tribal Health Care Research Program, 253 surveys of medicinal plants, standardization of 193 single drugs & 139 formulations, 32 publications, 17 Ayurveda drugs developed under the feasibility study of introducing Ayurveda in RCH program and screening of 7.62 lakh patients done for safety monitoring of Ayurveda & Siddha drugs under the pharmacovigilance system.
- b) Central Council for Research in Unani Medicine: Developed 13 Unani drugs, validation studies on Unani drugs for chronic & common ailments, SOPs and pharmacopieal standards of 263 compound formulations & 150 single drugs developed, chemistry studies on 8 medicinal plants, safety evaluation of 8 drugs, 20 surveys on medicinal plants, 21 farmers' meets on cultivation & marketing of medicinal plants, published 4 monographs & reprinting of 28 rare books, translation of eight books, 12 seminars/workshops and 168 research papers published.
- c) Central Council for Research in Yoga & Naturopathy: 44 research projects (6 literary and 38 others) undertaken, 136 institutions supported for promotion of Yoga & Naturopathy, organised 4 seminars/workshops, grant-in-aid provided to 66 seminars/workshops, 14 newsletters published, 15 events conducted under national campaign on Yoga and construction of two Central Research Institutes of Yoga started.
- d) Central Council for Research in Homeopathy: 15 research studies conducted; 55 research articles & 25 drug-proving studies published; drug-proving studies completed on 14 homeopathic drugs; clinical verification of 34 drugs completed; 6 Fundamental Research studies completed; brought out 24 books, 27 handouts, homeopathy research journals & newsletters; 29 health melas/exhibitions; 19 seminars/workshops; 10 CME programs and massive nation-wide campaign on Homeopathy for mother and child care.
- e) Central Council for Research in Siddha: The Central Council for Research in Siddha has been created in 2010-11 with bifurcation of CCRAS and annual budget allocation of Rs. 6 crore provided for 2011-12; the achievements of the Council include completion of 3 clinical studies and 3 observational studies on clinical safety of selected Siddha mineral/metallic medicines; completion of 26 pharmacological and 39 pharmacognostic studies; and publication of 10 scientific documents.
- f) **Central Councils' Combined Building Complex**: Renovation and modernization of the building has been done.
- g) **Extramural Research Projects through Research institutions etc:** 65 projects completed and 96 other projects have been supported.
- h) Patent Cell for ISM&H intellectual property rights: Transcription of 61359 ASU formulations and 1195 Yoga postures done in patent compatible format, access agreement signed with 5 international patent offices.
- i) **Survey on Usage & Acceptability of ISM&H systems**: National Sample Survey Organisation (NSSO) has been finalised to take up the survey on AYUSH-based health seeking behaviour of people and extent of usage among communities.

j) National Medicinal Plants Board (Rs. 360.07 crore): Support was provided to 39 projects about medicinal plants cultivation, 86 projects on Storage Godowns & JFMCs, for conservation of medicinal plants on 26158 hectares of land, 67 R&D projects, 85 capacity building & IEC activities and for setting up 3123 school/home herbal gardens.

During the mid-term appraisal it was felt necessary to increase the outlay of Research Councils because of revision of salaries, filling up of vacant posts, creation of new posts and also to undertake research activities in the thrust areas, where more funds would be required. Research Councils have also been entrusted with several new initiatives for scientific development of AYUSH on the basis of recommendations of various Committees and forums. For medicinal plants sector, it was emphasized to provide greater focus to set up Medicinal Plants Conservation Areas (MPCAs), support Joint Forest Management Committees (JFMCs)/Panchayats for value addition, warehousing and marketing and to encourage ex-situ conservation of prioritized species of medicinal plants. Extension of support for management, R&D, training/capacity building and promotional activities in the area of medicinal plants was also recommended.

Considering the limitations of the intramural and extramural research programs and the need of supporting innovative proposals and opening up networked research activities, it is felt necessary to broaden the scale and ambit of government-supported research. Horizontal as well as vertical strengthening of the research initiatives is required both within and outside the Research Councils for keeping possibilities open to support innovative scientific endeavours and structures in the interest of AYUSH development. The research areas left out of the priority list of existing programs have to be taken up to inculcate trans-disciplinary and collaborative R&D and build up institutional and human resource capacities. Catering to the training needs of postgraduates, young researchers and scientific writers is an important area to develop dedicated human resource that can act as change-makers in the emerging AYUSH sphere. AYUSH research is accordingly proposed to be given a paradigm shift in the 12th Plan with addition of following specific interventions & indicative financial implication -

- i) Establishment of five regional Hi-tech quality testing laboratories under Research Councils, concept note in this regard is given in subsequent pages under 'New Components/Schemes' Rs. 500 cr. (this projection is included @ Rs. 100 cr per laboratory in the individual council's allocation).
- ii) Setting up of Central Council for Research in Sowa-Rigpa, concept note of this proposal is provided under 'New Components/Schemes' Rs. 50 cr.
- iii) Mandate-based strengthening of infrastructure and scientific staff of Research Councils' units to develop as accredited Centres of Excellence one each for Clinical Research, Fundamental Research, Pharmaceutical & Drug Research, Literary Research- Rs. 900 cr.
- iv) Networked program for development of robust standards and safety & efficacy data of selected AYUSH remedies/ therapies of global importance, new dosage

forms/drug delivery mechanisms and AYUSH-based diagnostic/prognostic tools and disease-markers - Rs 250 cr.

v) Fellowship Program for AYUSH postgraduate & Ph. D scholars and non-AYUSH scientists with needful strengthening of identified institutes, 100 fellowships per year on prioritised AYUSH research topics will be provided, concept of this initiative is provided under 'New Components/Schemes' - Rs. 50 cr.

Besides, it is also proposed to undertake validation studies of 50-100 classical formulations each listed in AS&H pharmacopeias and formularies, development of postgraduate AYUSH research registry, strengthening of Research Councils' infrastructural facilities and their on-going research activities. These interventions will be appropriately accommodated by making necessary modifications in the intramural and extramural research programs. The allocation for AYUSH-targeted surveys & studies has been scaled up significantly to facilitate conduct of gap-analysis studies of AYUSH facilities and for generating objective data required for policy decisions, planning and health management information.

In order to strengthen the on-going research activities and materialize the above-mentioned scientific initiatives & structures of innovative nature, it is proposed to provide an outlay of Rs. 2649.50 cr in the 12th Plan under the subhead 'Research Councils'.

The Central Sector Scheme for Medicinal Plants administered through National Medicinal Plant Board (NMPB) is proposed to be expanded with an aim to widen the cultivation & conservation base, improve the export and reduce the import of medicinal plants and build up organisational capacity at central & state levels. With this the National Medicinal Plants Board and the State Medicinal Plants Boards being the nodal points need to be strengthened and focused interventions & required resources as under are intended in the 12th Plan to imbibe capacities and facilities for quality production, processing and management of medicinal plants & herbal raw materials-

- Reforestation/conservation of medicinal plants covering 60000 hectares-Rs. 700 cr.
- Support for development of 100 herbal gardens- Rs. 50 cr.
- Research & Development Studies- Rs. 200 cr.
- Development of agro-techniques- Rs. 2 cr.
- Setting up Medicinal Plants Conservation Areas (MPCAs)- Rs. 40 cr.
- Capacity building & IEC activities related to medicinal plants including promotion of GACPs, Good Storage Practices etc.- Rs. 150 cr.
- Setting up National & State Repositories of medicinal plants- Rs. 30 cr.
- Support for primary processing of medicinal plants by JFMCs- Rs. 200 cr.

- Strengthening of State Medicinal Plants Boards- Rs. 50 cr.
- Four new initiatives have been included under the central scheme for (i) Development of National Institute of Medicinal Plants - Rs.100 cr. (ii) Development of National & State Herbal Gardens- Rs 125 cr. (iii) Operationalizing Quality Certification Scheme for Herbal Products & Fiscal Incentives thereto- Rs. 50 cr. and (iv) Development of newer candidate species for global markets.

Thus, an allocation of Rs. 1797.00 crore would be required to implement the above interventions under the sub-head 'Medicinal Plants'. The proposed interventions shall be operationalized through State Medicinal Plants Boards, State Forest Departments, Horticulture Commissions, Quality Council of India, and Research & Development Institutes for Medicinal Plants, SPVs of Industries and Facilitation Centres for training & capacity building.

Total allocation projected under the head "Research & Development including Medicinal Plants" thus amounts to Rs. 4446.50 cr.

(4) Human Resource Development (Training Programs/Fellowships/Exposure Visits/Up-gradation of skills etc.)

National Institutes, Model Colleges, Central Research Institutes, Universities, Central/State Resource Training Centres, State AYUSH Directorates /Boards, Open Universities, Distant Education Centres etc are supported through this scheme to undertake HRD activities like CME, Re-orientation training etc. of AYUSH personnel. The allocation in 11th Plan for this scheme was Rs. 30 crore including Rs 5 crore specifically for HRD activities other than CME and Re-orientation Training.

11th Plan achievements under the scheme up to 2010-11 include-

- 406 re-orientation training programs for AYUSH teachers and 10 for paramedics
- 311 CME programs
- 38 other HRD activities

In the mid-term appraisal the scheme has been found to be useful to the AYUSH personnel to update their professional knowledge & skills and learn scientific inputs & current trends. It was recommended to strengthen the scheme to promote mainstreaming of AYUSH and add new teaching program of 50-100 hours on Ayurveda for allopathic doctors with financial support @ Rs. 5 lakh for one batch of 20 participants.

Considering the mid-term appraisal of the scheme and to address the diverse training needs of the AYUSH personnel, it is proposed to increase the scheme allocation in 12th Plan to Rs. 165 crore and merge the two components of the existing scheme. With this much allocation it is intended to-

- broaden the training base of AYUSH in the country for encouraging AYUSH personnel to undergo need based professional training and skill development, which may also include training programs for AYUSH researchers/scientists, drugs regulatory staff, drug manufacturers regarding SOPs/GMP/GLP etc and for scientific writing.
- do need-based restructuring of the training programs & modules and bring in new elements of training as per the contemporary needs of AYUSH practitioners, teachers and paramedics, and
- to conduct Mainstreaming of AYUSH-related trainings of health/AYUSH workforce, ASHAs, Anganwadi workers etc with customised modules for specific training outcomes.

(5) Cataloguing, Digitization of Manuscripts and AYUSH IT Network

The activities undertaken through this scheme are of national importance to protect AYUSH knowledge imbibed in rare manuscripts and engage in relevant literary research and publication.

In 11th Plan period, major achievements of scheme implementation include-

- Acquisition/digitization and publication of 23 manuscripts
- Publication/translation of 14 books and manuscripts.

It is sought to enhance the scheme's outlay of Rs 40 crore in 11th Plan to Rs.125 crore and continue with both the components in 12th Plan as under-

- the first component for development of AYUSH related IT tools/applications and networks to enhance the visibility of AYUSH systems and their scientific knowledge of stakeholders' interest in the area of education, health delivery, research and awareness building. Through this component of the scheme funding will be provided for IT application to AYUSH elements and to set up National and State web-portals encompassing information of registered practitioners, dispensaries, hospitals, teaching institutions, centres of excellence, R&D units, drug testing facilities, industrial units etc with their geographical details (Rs. 25 crore).
- the second component for covering acquisition-digitization-microfilming-editingtranslation and publication of manuscripts. An umbrella initiative is intended in the 12th Plan for listing, acquisition, micro-filming, digitization, editing, translation and publication of AYUSH manuscripts to be done in collaboration with National Manuscripts Commission & Indian Council of Historical Research to bring up targeted outcomes related to most important manuscripts of AYUSH usage and research. (Rs. 100 crore).

(6) International Co-operation

In accordance with the National Policy, promotion and propagation of AYUSH abroad is facilitated through this scheme by supporting International exchange Programmes/Seminars/Workshops on AYUSH and International Cooperation activities including market development/workshops/seminars/conferences/exhibitions/trade fairs/Road shows etc. In the 11th Plan allocation of Rs. 40 crore was made for this scheme and the key achievements are-

- Deputation of AYUSH experts and officers in 95 international events.
- 17 foreign delegations hosted to explore opportunities of international collaboration.
- Support provided to 38 experts for presentation of scientific papers in international conferences.
- AYUSH entrepreneurs were supported to participate in 17 international exhibitions/fairs, road shows etc.
- 12 conferences/research collaborations supported through Indian Missions.
- 16 fellowships granted to foreign students for studying AYUSH in India.
- One AYUSH Information Cell set up in Malaysia.
- 2 AYUSH books translated and published in foreign languages.
- Indo-US Centre for Research in Indian Systems of Medicine has been set up in the University of Mississippi, USA to undertake scientific validation and development of scientific information on ASU medicines through collaborative research and advocacy.
- MoUs drawn/entered in to with China, Russia, SAARC and ASEAN Countries.
- Eight community herbal monographs prepared and submitted to EU.

Mid-term appraisal of the scheme pointed out the need to take corrective measures regarding funding aspects of foreign-deputation of non-official experts and enhancement of upper limit of support for market development, collaborative research and promotional activities. Collaboration with premier Research & Development institutions abroad was emphasized to tackle the questionability of efficacy of ASU medicines.

12th Plan allocation for IC is proposed to be hiked to Rs. 160 crore with needful modification of the scheme to provide for and to facilitate the following additional activities -

> International collaboration in AYUSH research on global health problems & needs;

- Organising annual interactive meets with international medical schools & scientific organisations in potential countries to explore educational and research collaboration and development of institute-to-institute linkages in the interest of AYUSH promotion;
- Placing AYUSH Counsellors/Attaches in major Indian Embassies/Consulates to explore, coordinate, facilitate and guide AYUSH promotion, recognition, entrepreneurship, collaboration and other relevant activities;
- Establishing AYUSH chairs in major international universities to foster bilateral cooperation for promotion of AYUSH education, research, and exchange of expertise and recognition of qualifications.

(7) Development of AYUSH Industry

This scheme is meant for supporting development of common facilities for AYUSH industry clusters and for providing incentives to industry for participation in fairs and conduct of market studies. The 11th Plan provisioning for this purpose is to the tune of Rs. 505 crore and the major achievements are-

- Development of common facilities of quality control, manufacturing and storage of drugs approved for industry clusters in Maharashtra, Karnataka, Tamilnadu, Kerala, Andhra Pradesh, Orissa, Rajasthan and Punjab and three others for Uttrakhand, Gujarat and Assam are targeted.
- 275 industrial units were given incentive to participate in fairs/exhibitions.

Mid-term appraisal of the scheme implementation brought out the need of doubling the initial outlay of Rs. 100 crore to Rs. 200 crore to cover adequate number of industry clusters in the country and recommended that the workshops/seminars/training programs on Quality Control and Quality Assurance of ASU drugs may be conducted for sensitization of drugs regulators and manufacturers.

It is sought to provide allocation of Rs. 1010.50 in the 12th Plan for supporting the development of common facilities at least for one industry cluster in each state, for encouraging increased participation of industry in fairs/exhibitions for exposition of AYUSH and for conducting various relevant activities of industry interest.

(8) Funding of NGOs engaged in local health traditions, midwifery practices etc. under NRHM

11th Plan provides an allocation of Rs. 25 crore for supporting project-based NGOs' activities focused at revitalization, propagation, documentation and validation of local health traditions, midwifery practices etc. During the plan period 37 proposals have been supported.

Department of AYUSH in its pursuit to implement policy directive for revitalization and promotion of local health traditions and needful engagement in their scientific validation has accorded lot of importance to support the initiatives of NGOs in this direction. So as to cover the expected number of proposals, as the scheme has been widely circulated and known to various NGOs, it is proposed to allocate Rs. 100 crore in the 12th Plan amounting to four-time hike from the 11th Plan allocation.

(B) Centrally Sponsored Schemes

This category of schemes is meant to fund proposals recommended by the State Governments for strengthening infrastructural facilities in the area of AYUSH education, health care and quality control and development of medicinal plants sector. Consequent upon their mid-term appraisal, the sub-schemes have been suitably modified in terms of eligibility criteria, funding pattern and ceiling limits and are proposed to be continued in 12th Plan with enhanced allocation but without making any structural changes. However, in order to achieve tangible outcomes of long term value, implementation aspects of the schemes will be modified to facilitate that elements of questionable utility are prevented. **As the forthcoming demand of availing these schemes is likely to increase, it is proposed to provide an allocation of Rs. 20863 crore plus transfer of Rs. 10000 crore from NRHM flexi pool in the 12th Plan.** Relevant details of each of the schemes with projected allocation and justification thereto is provided hereunder.

(9) **Promotion of AYUSH**

The elements included in this scheme for extending grant-in-aid are- (a) Development of Institutions, (ii) Hospitals & Dispensaries comprising of separate subschemes for strengthening of AYUSH hospitals and dispensaries and for facilitating mainstreaming of AYUSH under NRHM with creation of AYUSH facilities in primary health network and support for supply of medicines to state dispensaries and (iii) Drugs Quality Control.

11th Plan provides total allocation of Rs. 1400 crore under this head with break up as under-

- b) Hospitals & Dispensaries Rs. 625 crore
- c) Drugs Quality Control Rs. 225 crore

The major achievements under these components during 11th Plan are-

- a) **Development of Institutions**: 120 proposals of AYUSH teaching institutions supported including mainly that for infrastructural development of UG/PG colleges, starting add-on pharmacy/paramedical courses and development of model colleges.
- b) Hospitals & Dispensaries: 1933 PHCs, 260 CHCs and 83 District Hospitals supported for setting up AYUSH facilities; 6359 state health units given financial support for meeting recurring costs; 31894 dispensaries/colocated AYUSH units supported for purchase of medicines, 370 AYUSH

hospitals given assistance for up-gradation of infrastructure and 394 for meeting recurring costs; and 23 State Program Management Units supported for meeting recurring expenditure.

c) Drugs Quality Control: 12 State Drug Testing Laboratories, 17 Pharmacies, 34 State Drug Licensing Authorities, 62 proposals of strengthening enforcement mechanism for ASU drugs, 11 proposals of strengthening in-house quality control laboratories of drug manufacturers supported.

Mid-term appraisal of the individual schemes found certain implementation constraints and the needs of expanding the scheme-ambit and suggested following corrective measures-

Development of Institutions

- Eligibility criteria for releasing grant-in-aid to Govt/Govt.-aided AYUSH institutions may be revised in order to enable institutions to come up to meet CCIM/CCH norms.
- Ceiling of grant-in-aid for UG, PG and development of model institutions/centre of Advance Studies and similarly for starting add-on courses may be increased.
- Grant-in-aid to support setting up of AYUSH colleges/Universities in states devoid of them may be extended on 85:15 matching share basis (90:10 in case of Northern States), as applicable in NRHM.

Hospitals & Dispensaries

- Up-gradation of infrastructural facilities in existing AYUSH hospitals may be done in a phased manner.
- Recurring grant for supply of essential medicines may be scaled up and provided to all existing AYUSH units.
- Admissible assistance may be provided to such PHCs/CHCs/District Hospitals, where AYUSH manpower has been provided under NRHM Flexipool, to create necessary infrastructure.
- Assistance may be provided to States for setting up Programme Management Units AND Health Information Management System (HMIS).
- Financial support as per the existing scheme with viability gap funding may be provided for setting up infrastructure in states, where AYUSH network of hospitals and dispensaries is poor and services be arranged in such facilities by supporting Non-governmental organizations of repute.

• Provision may be made in the scheme to engage doctors in the State AYUSH dispensaries/hospitals, where NRHM does not provide for doctors.

Drugs Quality Control

- The limit of assistance to Drug Testing Laboratories may be increased.
- State Drug Testing Laboratories desirous of working in PPP mode may be supported on recurring basis for staff and consumables.

In view of the above and the intention of the Government to inculcate quality education, improved health care services and effective drug quality control & regulatory mechanism, it is proposed to increase the allocation for the scheme in 12th Plan to Rs. crore (including Rs. 10000 crore transfer from NRHM flexi pool allocation for mainstreaming of AYUSH related activities under the Hospitals & Dispensaries subscheme) with relevant justification for each sub-scheme as under-

- Development of Institutions: Allocation of Rs. 7425 crore in 12th Plan is sought against this scheme with the aim to fulfil the perceived needs of AYUSH education sector and to enable enhanced scope of the schematic provisions on the basis of following justification-
 - (a) The present allocation of Rs. 2.00 Crores for UG Colleges, Rs. 3.00 Crores for PG Colleges and Rs. 5.00 Crore for Model Colleges is inadequate to develop the institutions to higher viable standards which may attract the students as well as the patients leading to real mainstreaming of AYUSH. Hence, it is proposed that the grant-in-aid limit may be increased to Rs. 8.00 Crore for UG colleges and Rs. 12.00 Crore for PG Colleges with the target of supporting 100 UG Colleges and 50 PG Colleges in 12th Plan. For this an allocation of Rs. 1400 crore is proposed. It is also recommended that the enhanced rate of grant-in-aid may cover the funding required for developing the Computer Laboratory, E-Library, Wi-Fi Campus, development of Research Laboratories in the colleges, Digital Records System for the attached hospitals, up-gradation cum modernization of the institutional hospitals by installation of modern diagnostic equipment under the umbrella of "Development of AYUSH institutions" scheme.
 - (b) The rate of grant-in-aid for development of Model colleges may be increased to Rs. 20.00 Crore and one college in each state may be supported, for which an amount of Rs. 700 crore would be required to cover 35 eligible colleges across the country. It is proposed to establish separate Interdisciplinary Research Department in every model college which may be called 'Central Research Station' wherein the experts from various science streams like Biochemistry, Biotechnology, Pharmacology, Molecular-Biology and Biostatistics could be available to undertake interdisciplinary research. All the Departments in the AYUSH Model College will have access to "Central Research Station" to carry out research in their specific subject. This approach will help to avoid unnecessary departmentalism and duplication of

facilities and will pave the way for an environment of focused scientific endeavors and outcomes.

- (c) The existing scheme provision of 3.00 cr for starting add on PG/Pharmacy/Paramedical courses may be increased to Rs. 6.00 cr and the colleges may also be supported for starting M.Sc. like master degree courses of Medicinal Plants, basic sciences with AYUSH specialty etc along with the courses already mentioned in the scheme under 11th Plan. The colleges running such courses may provide facility of elective and credit courses in related subjects to the UG & PG students of AYUSH during the course of their studies. The credit courses could be formulated in such a way that if a student undertakes a particular credit course every year throughout the academic career, in that case he would be able to have additional degree in the particular stream. This provision will open more job opportunities to the AYUSH doctors and will also attract meritorious students to ASUH courses. Model/PG colleges may also be considered for financial support to start additional new courses like M.Sc. (Medicinal Plant Chemistry) and other research training programs and credit courses with the available infrastructure. The provision of additional support mentioned above may also be extended to the institutes willing to start paramedical courses for therapists, pharmacists, nurses etc. in AYUSH systems. Under this subscheme allocation of Rs. 600 crore is sought.
- (d) Grant-in-aid to support setting up of AYUSH colleges/Universities in states devoid of them may be extended on 85:15 share basis (90:10 in case of Northern States), as applicable under NRHM. It is proposed to expand the ambit of the scheme provision to facilitate opening of AYUSH departments in health universities as well as conventional universities to give specific identity to AYUSH education in the university system, which so far is lacking. The funding rate of Rs. 10 cr per unit under the scheme may be increased to 30 cr and about 10-15 such entities would be supported in the 12th Plan, for which an allocation of Rs. 300 crore is proposed.
- (e) It is proposed to take up up-gradation of state level AYUSH Institutes (one in each state) as Centers of Excellence to the level of National Institutes with estimated funding @ Rs.135.00 crore per Institute (Rs. 60.00 crore as fixed cost and Rs. 15.00 crore per annum as recurring cost). Accordingly, the estimated expenditure amounting to Rs. 4425 cr has been included in the projected allocation of the scheme.
- ii) Hospitals & Dispensaries Scheme: Requirement of Rs. 22633 cr. including transfer of Rs. 10000 crore from NRHM Flexi-pool is proposed to continue with the existing provisions of the scheme and support/undertake the following additional initiatives in 12th Plan period
 - a) AYUSH Program Implementation Plans (PIPs) of the states under NRHM including engagement of AYUSH manpower in PHCs/CHCs/District Hospitals, which are funded from NRHM-Flexi-pool, may be handled in the Department of AYUSH for better coordination with the State AYUSH

Directorates/Departments and to facilitate optimal implementation of mainstreaming of AYUSH strategy in right perspective. Transfer of Rs. 10000 cr from NRHM Flexipool to 'Hospitals & Dispensaries' part of the Centrally Sponsored Scheme is therefore urged in 12th Plan to steer integration process in the states with a focused approach for gainful outcomes in health care delivery and improving AYUSH services with need-based integration interventions. The details of the proposal are given under the head "New Components/Schemes" in subsequent pages.

- b) The ambit of the scheme for 'Development of AYUSH Hospitals & Dispensaries', is proposed to be expanded to include (i) AYUSH hospitals & dispensaries run bv local government bodies like Municipal Corporation/Committee etc, which are presently out of the scope of NRHM for extending support for up-gradation of infrastructural facilities and supply of essential drugs to teaching hospitals and (ii) establishment of independent AYUSH hospitals in PPP mode with support of Rs. 10 Cr. per hospital. About 35 such hospitals (one in each state) are proposed to be provided support in the 12th plan. The allocation sought under the respective components amounts to Rs. 300 cr and Rs. 350 crore respectively.
- c) Financial support as per the existing scheme with viability gap funding is proposed to be provided for setting up infrastructure in states, where AYUSH network of hospitals and dispensaries is poor and services be arranged in such facilities by supporting non-governmental organizations of repute.
- d) Covering all PHCs/CHCs/District Hospitals for creation of infrastructure for co-location of AYUSH facilities.
- e) Implementation of National AYUSH Health Program (Rs. 1000 cr), details given under the head "New Components/Schemes" in subsequent pages.

(iii) Drugs Quality Control scheme: An outlay of Rs 805 cr. has been proposed in the 12th Plan to continue with the existing scheme provisions and in addition respond to the requirements of-

- Setting up Central Drug Controller for AYUSH, details given under 'New Components/Schemes)- Rs. 166 Crore.
- Further strengthening of the State Drug Testing Laboratories and Pharmacies (Rs. 400 cr.)
- Supporting the concept of AYUSH Janaushadhi retail outlets for promoting the availability and use of classical formulations in rural areas (Rs.100 Cr).

 Increasing the limit of assistance to ASU&H manufacturing units for establishment of in-house quality control laboratory to Rs. 1.00 cr per unit. (Rs. 100 cr.)

In order to strengthen the enforcement of Drugs and Cosmetics Act and facilitating availability of quality medicines in the market, it is felt appropriate to continue the scheme with needful modifications as mentioned above and support relevant proposals from the states.

(10) Development of Tertiary Care AYUSH Facilities in PPP mode

Development of AYUSH health care facilities in PPP Mode has been accorded high priority and the allocation for this purpose in the 11th Plan amounts to Rs. 50.00 cr. In the mid-term appraisal of the Centrally Sponsored Scheme for Hospitals & Dispensaries, it was emphasised that the constraint of creating posts for setting up specialised AYUSH facilities needs to be overcome and the possibilities of public-private partnership should be explored regarding provision inter alia of quality health services with the involvement of private sector.

Accordingly, it is proposed to enhance the scheme allocation to Rs. 350.00 cr in the 12th Plan to meet the emerging demand of entering in to Public-Private Partnership with reputed AYUSH institutions and encouraging private allopathic hospitals to create/widen specialized AYUSH-based health care for the benefit of people. The proposed hike in allocation is seven times from the 11th Plan allocation.

(11) National Mission on Medicinal Plants

Under this head the National Medicinal Plants Board is implementing a Centrally Sponsored Scheme during 11th Plan with an outlay of Rs. 485 crore. The scheme is primarily aimed at supporting market driven medicinal plants cultivation on private lands with backward linkages for establishment of nurseries for supply of quality planting materials and forward linkages for post-harvest management, processing, marketing infrastructure, certification and crop insurance in project mode. This is being achieved by cultivation of medicinal plants in identified zones/clusters within selected districts of States having potential for cultivation of certain medicinal plants and promotion of such cultivation following good agricultural practices through Farmers, Cultivators, Growers' Associations/ Federations, Self Help Groups, Corporates, and Cooperatives.

The achievements under the scheme include-

- Setting up of 636 nurseries of medicinal plants
- Coverage of 51308 hectares of land for cultivation of medicinal plants
- Support provided to 25 post-harvest infrastructure units
- Putting in place 5 processing units and 2 market promotion units.

It was realised during mid-term appraisal of the scheme that-

- i) State Medicinal Plants Boards, which are nodal agency for medicinal plants in the states, should be strengthened with Project Management Units in each state to step the implementation of the scheme.
- ii) Minimal gross amount of subsidy for large-scale cultivation of medicinal plants should be increased to the limit prescribed under National Horticulture Mission.
- iii) Release of funds for cultivation assistance should be field-verification based instead of being credit linked.

As the commercial scale cultivation of medicinal plants is critical for assured supply of quality raw materials to the industry, the support being provided for this purpose needs to be enhanced for covering large projects and more species of medicinal plants. Also, facilities for supply of quality seedlings & saplings and processing of medicinal plants with forward & backward linkages, quality certification and support for collection and marketing of plant-based raw materials are essentially required to attract farmers towards cultivation of medicinal plants and promote the related trade. An allocation of Rs. 1710.00 cr with 3.53 times hike from the 11th Plan is, therefore, sought under the scheme in the 12th Plan to undertake the following interventions, break up of indicative requirement is given in bracket for each intervention –

- to expand the cultivation status of medicinal plants over 2,00,000 hectares of land (Rs. 600 cr.),
- for induction of voluntary certification scheme for medicinal plants (Rs. 30 cr.),
- for expansion of organic produce certification scheme (Rs. 50 cr.),
- for development of 20 Medicinal Plants Processing Zones (Rs. 400 cr.),
- for raising 2000 nurseries (Rs. 480 cr), and
- for providing minimum support price to the collectors of medicinal plants and marketing support to the farmers (Rs. 150 Cr.).

The above initiatives overseen by NMPB are proposed to be taken up through State Medicinal Plants Boards, Forest Departments, Horticulture Missions, Special Purpose Vehicles of Industries, Quality Council of India and Agencies of Ministry of Tribal Affairs-Agriculture-Forests & Environment.

(C) New Components/Schemes

Following new components/schemes are proposed for addition added in the projected 12th Plan to steer effective promotion of AYUSH for public benefit and addressing the quality issues of drugs, manpower and education-

(i) National Commission for Human Resources in AYUSH

The Commission has been conceived as an institutional framework to address issues related to regulation, shortage, quality assurance and inequitable availability of AYUSH professionals & work force. This proposal is based on the lines for abolishing existing regulatory bodies for allopathic, dentistry, pharmacy and nursing education and practice by repealing the existing laws. The Commission shall undertake work force study, formulate action plans and ensure inter-sectoral coordination to promote availability of Quality Human Resources in AYUSH including that of Yoga & Naturopathy, which are so far not regulated /accredited in the country. The issues related to AYUSH paramedical education, HR development and regulation will also be dealt under this arrangement. The Commission shall provide two sets of autonomous bodies as (i) National Councils of professionals of each of Ayurveda, Unani, Siddha, Sowa-Rigpa, Homoeopathy, Yoga & Naturopathy and (ii) National Board for Education, Training and Examinations and Natural Evaluation & Assessment Committee for Indian Systems of Medicine, Homoeopathy, and Yoga & Naturopathy, Nursing in Indian Systems of Medicine / Homoeopathy and courses in pharmacy. Their head offices would be in Delhi with full time Chairpersons and Members and part time & nominated members. Appropriate infrastructure and manpower would be required to run the secretariats. This arrangement will help steering educational reforms in AYUSH as raised in the discussion note circulated by the Planning Commission for the Steering Committee.

Financial Implication: About Rs. 125.00 crore.

(ii) Setting up of Referral hospitals in 8 National Institutes

The credibility of the AYUSH streams is impingent on evidence-based quality health care. The National AYUSH Institutes being the premier institutions in the country attract large number of patients, including the referred ones. Necessarily, these institutions should provide outstanding patient care services in their particular systems. The standards and upkeep of hospitals attached to National Institutes are not encouraging, mainly due to neglect & poor investment and they continue to be just like general hospitals. It is, therefore, proposed to upgrade the hospitals in eight National Institutes like IPGTRA, NIA, NIUM, NIS, NIH, AIIA, NEIAH, NEIFM and two National Institutes of Yoga and Naturopathy with world class treatment facilities and conditions with NABH accreditation for secondary & tertiary level health care providing adequate diagnostic & investigative facilities, machineries, equipment, IT gadgets and manpower including specialised therapies & consultation services and infrastructure for clinical research.

Financial Implication: About Rs. 100 crore per hospital for eight institutes and Rs. 10 crore each for Yoga and Naturopathy institutes totalling Rs. 820 Crore. This proposal along with estimated expenditure is included under the Educational Institutions' allocation.

(iii) Setting up Homeopathic Medicines Pharmaceutical Corporation Limited (HPCL)

Presently, the Homoeopathic industries participating in Govt. supplies by and large are not GMP-compliant and are not equipped with qualified technical staff or quality control facilities.

This amounts to violation of Drugs & Cosmetics Act and it is very difficult to ensure that quality of medicines is supplied to Govt. dispensaries & hospitals. Other important factor is that private industries mainly manufacture patent & proprietary medicines discouraging classical pharmacopeial products. There is only one unit in Govt. sector i.e. Kerala Co-operative Homoeopathic Manufacturing Unit having annual turnover of Rs.10 crore which is not sufficient to meet the requirement of Government Departments and supplies under NRHM. It is, therefore, felt necessary to set up an IMPCL like public sector enterprise for manufacturing of homeopathic medicines to ensure quality & timely supplies to CGHS, State dispensaries and Homeopathic facilities under NRHM.

Financial Implication: Rs. 75.00 cr are estimated to meet the expenditure on land & building construction (Rs. 30 cr), equipment & machinery (Rs. 15) and recurring costs of consumables/maintenance and manpower (Rs. 30 cr.).

(iv) Setting up of National Institute of Medicinal Plants

The medicinal plants sector of India needs persons trained in all aspects of medicinal plants e.g. conservation, taxonomy, cultivation, processing, post harvest management, certification, trade, both domestic and international, biodiversity, TK related issues, protection of IPRs, HS codes, international agreements and treaties like CITES, Nagoya Protocol etc. Besides, there is a felt need to have an institutional mechanism for imparting training to the implementing agencies of NMPB schemes and design courses for training. There is also a need for an institute to undertake state of art research and act as a referral centre for all dimensions of medicinal plants. In order to fulfil these needs it is proposed to establish a National Institute of Medicinal Plants in 12th Plan period equipped with training facilities, herbal garden, demonstration site, raw materials processing & testing facilities, drugs repository and well-trained faculty.

Financial Implication: Rs. 100.00 cr (including non-recurring & recurring costs), it is included in the Research and Development including Medicinal Plants allocation.

(v) Setting up of Research and Quality Control Laboratories in 8 National Institutes

There is a scarcity of accredited laboratories for quality testing in the country. Very few laboratories exist in the private sector, which are GLP compliant and have the mandate for testing of natural products like ASU&H medicines. In the Govt. sector there is only one NABL accredited laboratory for ASU drugs i.e. the laboratory of Capt. Srinivas Murthi Drug Research institute, Chennai under Central Council of Research in Ayurvedic Sciences (CCRAS). As such the National institutes are the ideal locations to have Quality laboratories in the concerned system to undertake drug testing and research. The facilities shall be of NABL standard. It is, therefore, proposed to develop laboratories for drug testing and research in National Institute of Ayurveda- Jaipur; National Institute of Homoeopathy-Kolkata; National Institute of Unani Medicine- Bangalore; National Institute of Siddha- Chennai; Institute of Post Graduate Training and Research in Ayurveda and another for Homoeopathy); All India Institute of Ayurveda, New Delhi. Such an arrangement will help to expand the quality testing facilities in the country for ASU&H products as well as for their utilisation in research and training activities at institutional level.

Financial Implication: It is estimated that Rs. 100.00 cr per laboratory for eight laboratories amounting to Rs. 800 cr. (inclusive of non-recurring & recurring costs) would be required.

(vi) Central Drug Controller for AYUSH drugs

The Expenditure Finance Committee at its meeting held on 4.10.10 under the chairmanship of Secretary (Expenditure) has agreed to create infrastructure of Central Drug Controller for AYUSH drugs. Allocation of Rs.166.00 crore has been projected for this purpose in the 12th Plan. Under the Central Drug Controller for AYUSH Drugs, 40 posts including 25 regular and 15 contractual/outsourced posts will be created and in addition salaries of scientific manpower in 30 state govt. run Drug Testing Laboratories will be borne during 12th Plan period. This provision will be made under the Centrally Sponsored Scheme for Drugs Quality Control under the head - Promotion of AYUSH.

Presently the demand for traditional Indian medicine i.e. Ayurveda, Siddha, Unani and other herbal products has increased tremendously in India and abroad. The world herbal market is estimated to be \$62 billion out of which the share of China is \$19 billion and that of India is only \$1billion (PHARMAXECIL) There are around 10000 ASU Drugs manufacturing units in the country at present. To facilitate the increased acceptability of ASU medicines within the country and abroad, the core issue is the quality and standardization of ASU products and effective enforcement of the provisions of the Drugs & Cosmetic Act. It is recommended by the Ayurveda, Siddha and Unani Drugs Consultative Committee (ASUDCC) chaired by DCGI that a separate Central Drug Controller for ASU drugs may be created. The proposal along with required funds is incorporated in the Centrally Sponsored Scheme for Drug Quality Control.

(vii) Setting up All India Institute of Yoga

In view of the emerging demand for Yoga training and education, a dedicated institute at national level is required to undertake teaching & research programs and project strengths of Yoga with scientific data and evidence-based approaches, particularly in the area of psychosomatic and lifestyle diseases, where conventional medical approach does not provide effective solutions. The space required for this purpose is neither adequate nor geographically conducive in the present premises of Morarji Desai National Institute of Yoga, New Delhi. It is, therefore, intended to set up another National level institute of Yoga with distinct mandate and state of the art infrastructure near to the national capital in 12th Plan.

Financial Implication: Rs. 200.00 cr inclusive of non-recurring & recurring costs)

(viii) Setting up All India Institute of Unani Medicine, Hyderabad

Keeping in view the growing demand and interest of public in Unani System of Medicine, it is proposed to set up an All India Institute of Unani Medicine (AIUM) at Hyderabad with high class treatment facilities in Unani System, research facilities on modern parameters and good quality of U.G. and P.G. education. This Institute would have facilities for world class treatment in the system as per the Indian Public Health Standards (IPH), providing adequate diagnostic and investigative facilities through modern diagnostic equipments, machineries and manpower, specialist consultations services and upgraded research wing and thereby provide the status of a referral hospital. This will make the facilities comparable with the secondary/ tertiary health care hospitals in conventional system and will enhance the credibility of the Unani System of Medicine.

Financial Implication: Rs. 250.00 cr (inclusive of recurring and non-recurring costs) are estimated for allocation in 12th Plan.

(ix) Setting up All India Institute of Homeopathy

Homeopathy in India has established itself more than anywhere else in the world. It is regulated through Central Acts and Statutory regulatory body and a large infrastructure in the form of registered practitioners, teaching institutions, dispensaries and hospitals exist in the country. Being cost effective, palatable, safe and effective for the management of such diseases/disease-conditions as are considered untreatable in other systems of medicine, the demand for homeopathy has grown phenomenally. To fulfil the emerging interest of scientists for research in homeopathy and inculcate interdisciplinary understanding for promoting evidence-based use of homeopathy, it is proposed to set up a premier institute equipped with postgraduate education and research facilities and tertiary care hospital services. This will help exploring the scientific basis of homeopathic medicine and building up its credibility for the benefit of masses and mainstreaming in health care delivery system.

Financial Implication: Allocation of Rs. 250.00 cr (inclusive of recurring and non-recurring costs) is estimated for implementing the proposal in 12th Plan.

(x) Setting up of 5 Hi-Tech Quality Control Labs under Research Councils at regional level with NABL accreditation

The need for improving quality testing of ASU&H drugs has been raised from different forums. State Licensing Authorities have raised time and again where to send the samples picked up under the provisions of Drugs & Cosmetics Act for testing as the state laboratories are not equipped except in Maharashtra and Gujarat states, where the government drug-testing facilities are common for allopathic and ASU drugs. Drug Manufacturers, who are supplying medicines to Govt. dispensaries & hospitals and exporting to other countries, also find it difficult to get the products tested and certified from an authentic source. Drugs Consultative Committee has realized the need to address this problem. The Planning Commission in their discussion note for the Steering Committee on AYUSH for 12th Plan has also raised the issue of quality assurance mechanism and need of augmenting the drug testing facilities for AYUSH sector.

Therefore, in order to expand the quality control base of highest standards as per the requirement of Drugs & Cosmetics Act, 1940 and for the testing of exported/imported ASU&H drugs and for R&D purpose, it is proposed to set up hi-tech quality control laboratories under AYUSH Research Councils in the 12th Plan. To start with five laboratories from amongst the four Research Councils (two of CCRAS and one each of CCRUM, CCRH and CCRS) will be identified to develop as the regional laboratories and notified as the extended arms of PLIM & HPL to fulfil the drug testing requirements at the regional level and facilitate quality research in drugs. The proposed laboratories will be equipped with hi-tech quantitative & qualitative analytical tools & machinery and adequately trained manpower to meet the drug testing requirement of pharmacopoeial standards and testing of drug samples received from industry and state licensing authorities. Five regional laboratories are proposed, two from CCRAS and one each from CCRUM, CCRH and CCRS for quality testing of Ayurveda, Siddha, Unani and Homeopathy drugs in Northern, Southern, Eastern, Western and Central parts of the country.

Financial implication to the tune of Rs. 500 cr is estimated to materialise the proposed initiative in 12th Plan period. The required funds @ Rs. 100 crore per laboratory are included in the respective research council's allocation.

(xi) Setting up National AYUSH Library & Archives

Planning Commission in its discussion note for 12th Plan Steering Committee on AYUSH has raised the need to create a contemporary museum of AYUSH on the past, present and future of India's medical heritage. The idea is welcome and Working Group felt that instead of a stand-alone museum of AYUSH, a national library and archives with documentation centre & museum may be set up at a suitable place to preserve, project and disseminate important AYUSH articles of heritage including literary, official documents/records and tools/instruments of all systems and to undertake publication of AYUSH newsletter, journal etc. Considering the viability and importance of this concept, it is contemplated to house the proposed centre in one of the National Institutes, preferably under public-private partnership with a credible Trust or Foundation, selected on the basis of stipulated criteria by inviting expression of interest for specified terms & reference from capable organisations.

Financial implication: An allocation of Rs. 50 crore has been projected to cover the nonrecurring & recurring costs of the proposal and it is included under the Central Scheme for system strengthening within the strengthening of Department of AYUSH.

(xii) National Institute of Sowa-Rigpa

The educational system of Sowa-Rigpa is presently in the hands of some institutes run by the Tibetan bodies in trans-Himalayan region of India. Some sort of financial support is provided to these institutions from Government. However, the infrastructural facilities there are not sufficient to meet the aspirations of the students who choose to study Sowa-Rigpa for a professional career. As Sowa-Rigpa has been accorded state patronage, a dedicated institute of the system is required that may lead to develop benchmark standards of education, patients' care and postgraduate research and impart professional training to produce skilled manpower. Hence, a National Institute of Sowa-Rigpa is proposed to be set up in the 12th Plan period with facilities of UG & PG education, paramedical training and provision of clinical services through a well-equipped hospital. The possibility may be explored to acquire for upgrading the one Sowa-Rigpa institute supported by the Department of Culture to the level of proposed National Institute.

Financial implication: An allocation of Rs. 100 crore is indicated to set up the required infrastructure and meet the recurring costs.

(xiii) Central Council for Research in Sowa-Rigpa

Sowa-Rigpa system of medicine has recently been recognised as part of AYUSH and efforts are being made to strengthen its various aspects. Presently, an institute for research in Sowa-Rigpa with a limited mandate is functioning at Leh (Jammu & Kashmir) under the aegis of Central Council for Research in Ayurveda & Siddha. It does not have developed linkages and collaboration with other scientific institutions because of its geographical location and the activities there are not very contributory for the scientific development of the system. Unlike other Indian systems of medicine and homeopathy, the Sowa-rigpa has not been much explored scientifically and standards of drugs, therapies, procedures etc are lacking. It is, therefore, proposed to develop an organisational set up mandated with scientific validation and standardization of Sowa-Rigpa to facilitate research in literary, drug, clinical areas and medicinal plants. The Sowa-Rigpa Research Council can initially be started from the CCRAS headquarters with the present institute as the key unit to coordinate the implementation of the project till completion. The proposed institute may be enlisted under the Central Scheme for Research & Development including medicinal plants.

Financial implication: An allocation of Rs. 50 crore is proposed to meet the non-recurring & recurring costs. The proposal with its proposed allocation is included in the Central scheme for Research Councils.

(xiv) Setting up Indian Institute of AYUSH Pharmaceutical Sciences

Ayurveda, Siddha, Unani and Homeopathy have specific peculiarities in the preparation of medicines and dosage forms, which are quite differentiated from each other in terms of properties, stability and mode of administration. Growing emergence of interest towards natural health products looks for development of pharmaceuticals keeping pace with the new trends and technological advancements. Scientific exploration of various dosage forms of ASU&H drugs and use of modern drug-manufacturing technology compatible with ASU&H principles of pharmaceutics are critically important areas to work in. Understanding the nature, properties and dynamics of ASU&H medicines in contemporary scientific language can lead to global acceptability and promote trade. To address this issue with a focused approach, a dedicated national level institute comparable to NIPER is required to engage in AYUSH pharmaceutical education & research and collaborate with other scientific institutes for modernising traditionally used pharmaceutics. It is intended to include the proposed institute in the Central Sector scheme for Educational Institutions.

Financial implication: An allocation of Rs. 150 crore is proposed to establish the required infrastructure & related recurring costs.

(xv) AYUSH Gram

AYUSH Gram is a concept wherein one village per block will be selected for AYUSH interventions of health care. The overall health checkup of the entire population will be done by AYUSH doctors based on AYUSH systems and they will be provided basic knowledge for promotion of health and prevention of diseases. The communities will be educated about healthy practices and advantages of traditional food items used locally and their medicinal properties. The AYUSH doctors will also undertake health checkup camps at schools in and around the selected villages. AYUSH training will also be imparted to ASHAs, Anganwadi workers, school teachers etc. Awareness building activities would be conducted through grampanchayats involving schools, anganwadis, self-help groups and other community organizations. The villages near to PHCs having road connectivity will be selected for this program. Treatment for sick people will be provided through the PHC. This kind of program is already being implemented in Chhattisgarh and Gujarat states and has been found successful in AYUSH and community health promotion. Based on best AYUSH practices being adopted in different states, it is intended to propagate the concept of AYUSH Gram nationwide and support the proposals through the central scheme of "AYUSH and Public Health".

(xvi) AYUSH Telemedicine Services

Medicine assisted with new communication technology i.e Telemedicine has facilitated the outreach of health services to remote rural populations settled particularly in difficult terrains. Department of AYUSH with the intention of increasing the outreach of AYUSH services facilitated a pilot project of Tele-Homoeopathy in Tripura to provide health care through 10 centers coordinated by the State Homoeopathic Hospital, Agarthala. There being no enabling provision in any of the 11th Plan Schemes to support such a project, the financial support was provided by the National Institute of Homoeopathy, Kolkata from its own funds.

Another such telemedicine project is being run in Bihar state where the patients with eye diseases are provided Ayurvedic treatment. The project is undertaken through CCRAS for the advantage of patients that any time of the day they can walk into the kiosk, take consultation on video with a doctor sitting either in the PHC or Hospital. The first line of treatment is thus immediately provided in this way to the patients. This project is going on for the last one and a half year and found to be viable and successful. The project was selected for 'Sindia Award' given by Telecom Ministry and recently conferred with e-World 2011 Jury Choice Award under the Best Public Private Partnership initiative category jointly instituted by the Centre for Science, Development and Media Studies (CSDMS), Ministry of Communication & Information Technology, and Department of Telecom.

Department has received such proposals from states like J&K, Punjab, Jharkhand, Orissa and West Bengal. Considering the huge utility of telemedicine facilities for rural and remote populations, particularly where even basic public health infrastructure does not exist, it is proposed to introduce AYUSH Telemedicine nationwide during the 12th plan for covering the remote areas of the country including NE and Hilly states. Given the provision of required financial resources about 1,00,000 nodes are aimed to be established during the plan and the projects will be supported through the 'AYUSH and Public Health' scheme.

(xvii) AYUSH Fellowship Scheme

The fellowships are integral part of professional education for supporting the meritorious students to encourage them to excel in their scientific endeavors on particular subjects. This provision is available for students taking education in other streams. However, this provision is lacking in AYUSH sector. It has been observed that the demand for AYUSH education and research is increasing and meritorious students are motivated to pursue AYUSH as a professional career. Even scholars of other streams of science have shown inclination to explore AYUSH in their postgraduate/doctoral training & research. Vaidya-Scientist fellowship program run by one of the Centres of Excellence supported by Department of AYUSH is a beginning in this direction and it needs to be expanded by identifying suitable institutions and scholars to undertake AYUSH-specific scientific training and research activities during their postgraduate/doctoral studies. In order to steer this proposal 100 scholars per year are proposed to be initially supported for two years during the 12th Plan period by selecting them on the basis of a national eligibility test. It is also intended to provide needful support to the host institute for strengthening/provisioning of the required research infrastructure & logistics. The initiative shall be implemented as a part of the Central Sector scheme to be anchored by a central institute for coordination and facilitation. A national panel of interdisciplinary experts will identify the institutions and research topics and the scholars admitted in the scheme will be subjected to rigorous mentoring by peer experts of the related subject. The approach shall be to encourage interdisciplinary research on specific AYUSH issues that may augment scientific basis of AYUSH and provide tangible leads for further work. A provision of Rs. 50 crore is proposed for this intervention in the 12th Plan and it is included in the central scheme for Research Councils.

(xviii) National AYUSH Health Program

AYUSH systems are culture-friendly and known for robust health promotive guidelines and holistic approach. This inherent potential of AYUSH needs to be tapped for the control of non-communicable diseases and their public health implications. During 11th Plan, the Department of AYUSH identified specific strengths of AYUSH and initiated national campaigns with the involvement of States on geriatric health care, anemia control, mother and child health care, management of ano-rectal disorders through AYUSH systems. As a result of these campaigns peoples' awareness has been built up about the role AYUSH can play in improving health status of populations with lifestyle interventions and management of chronic diseases. It is now proposed to launch National AYUSH Health Program mandated with the objective of promoting AYUSH practices of maternal & child health care, geriatric care, mental health, nutritional care and health promotion for the benefit of masses. The program would be implemented like a Centrally Sponsored Scheme involving State AYUSH Directorates, Public Health facilities, AYUSH colleges and reputed NGOs working in related areas. Needful linkages will also be attempted with the National Non-Communicable Disease Control Program in implementing health promotion strategies of AYUSH. The program will be steered with the help of a National Steering Committee chaired by Secretary (AYUSH) and appointment of nodal points at central, state and district levels to coordinate and monitor the implementation. It is proposed to provide an allocation of Rs. 1000 crore for this purpose in the 12th Plan as part of the Centrally Sponsored Scheme for promotion of AYUSH.

(xix) Mainstreaming of AYUSH under NRHM

Mainstreaming of AYUSH under NRHM is one of the important thrust areas to improve the quality and outreach of health care and attain integration of health services. In the 11th Five Year Plan, public health facilities (PHCs, CHCs and District Hospitals) have been supported for co-location of AYUSH doctors, creation of necessary infrastructure and supply of AYUSH medicines. However, the coverage so far is not significant. Only 24.6% of the public health facilities could avail central assistance for AYUSH medicines and 8.7% PHCs, 5.8% CHCs and 13.9% District Hospitals availed the relevant centrally sponsored scheme for setting up infrastructure required for colocation of AYUSH facilities. In many of the cases the money has remained unspent in the states for the reason of not having dedicated AYUSH administrative setup under NRHM to monitor the progress. It has also come to notice that in many states AYUSH proposals under NRHM are not given attention and are not entertained while preparing the state PIPs. As a result mainstreaming of AYUSH could not make significant headway under NRHM except for colocation of AYUSH facilities in primary health network as there are no indicators for measuring the progress of integration and mainstreaming of AYUSH process. The AYUSH component under NRHM-Flexipool needs to be properly structured with specific indicators for progress evaluation and to facilitate examination of state proposals for evidencebased approval. It is also felt that administrative set up for AYUSH under NRHM needs to be established in the states with necessary infrastructure and required manpower. For all this a separate budget allocation is required for AYUSH in the NRHM-flexipool to support the state proposals with certain norms of funding for specific interventions, including creation of necessary administrative setup for AYUSH, support to PHCs/CHCs and DHCs in the country for collocation of AYUSH facilities/doctors, supply of medicines and other integration-facilitating activities. The program monitoring, training of ANMs, ASHAs etc, provisioning of AYUSH drug kits in sub-centres etc. are also intended under the proposed mainstreaming of AYUSH initiative under the NRHM. In the 11th Plan, a total of Rs. 967 crore approx. were invested from NRHM Flexipool for AYUSH mainstreaming activities, with which about 10% of the PHCs, CHCs and DHs could be covered. In order to complete the colocation of AYUSH services in all the units of the primary health network and support other mainstreaming of AYUSH activities in the states, budgetary requirement of Rs. 10,000 cr. is proposed in the 12th Plan with transfer of corresponding amount of funds from NRHM-Flexipool.
