

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. SUBHASH RAMRAO BHAMRE): (a) and (b) Earlier to issue of Arms Rules, 2016 by the Ministry of Home Affairs (MHA), the licenses for defence items were given by Department of Industrial Policy and Promotion (DIPP) under the Industries (Development and Regulation) Act, 1951 except for Small Arms and their Ammunitions. However, the position of licensing of defence items has changed thereafter. MHA *vide* their Notification dated 19.05.2017 delegated powers and functions to Secretary DIPP in respect of items included in the Notification. The items included in the Notification are mainly defence items categorized as Fire-Arms. The present position for issue of licenses for manufacture of defence items is as follows:—

- (i) For manufacturing of Small Arms and their Ammunitions, licenses are issued under Arms Act by MHA;
- (ii) For the defence items notified under the MHA Notification dated 19.05.2017, the licenses are issued under Arms Act by DIPP; and
- (iii) For manufacturing of other defence items, which are neither Small Arms nor covered in MHA's Notification dated 19.05.2017, such as electronic systems, communication systems etc., the licenses are issued under IDR Act by DIPP.

Foreign Direct Investment (FDI) Policy in defence sector was reviewed *vide* Press Note 5 of 2016 Series dated 24.06.2016. As per the extant FDI Policy, Foreign Investment up to 49% is permitted under the automatic route and beyond 49% is permitted through Government route, wherever it is likely to result in access to modern technology or for other reasons to be recorded. FDI Policy is subject to Industrial Licence under the IDR Act, 1951. Further, the Policy is also applicable to manufacturing of Small Arms and Ammunition under the Arms Act, 1959.

Schemes for promoting Ayurveda

†1763. SHRI RAM KUMAR KASHYAP: Will the Minister of AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (AYUSH) be pleased to state:

- (a) the steps taken by Government to facilitate any project to promote Ayurveda, in all the States of the country during last three years, so that Ayurveda can be promoted;

†Original notice of the question was received in Hindi.

(b) if so, the details thereof and if not, the reasons therefor; and

(c) the present status of treatment capacity and efficiency of each of the All India Institutes of Ayurveda?

THE MINISTER OF STATE OF THE MINISTRY OF AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (AYUSH) (SHRI SHRIPAD YESSO NAIK): (a) and (b) The Ministry of AYUSH, Government of India has set up Central Council for Research in Ayurveda Sciences for undertaking coordinating, formulating, facilitating developing and promoting research on scientific lines in Ayurveda. The details of the resultant research activities carried out by the Council during the past three years is given in the Statement-I (*See below*).

Ministry of AYUSH Government of India is also running Extra Mural Research Scheme on various aspects of AYUSH systems of medicines including Ayurveda since 1999. The details of Extra Mural Research Projects in respect of Ayurveda during the last three years is given in the Statement-II (*See below*).

The Standing Finance Committee (SFC) in its meeting held on 20.03.2017 had recommended for establishment of an All India Institute of Ayurveda, Yoga and Naturopathy at Goa as an extension of the existng All India Institute of Ayurveda, New Delhi at a total cost of ₹ 301.09 crore and a National Institute of Ayurveda, Yoga and Naturopathy at Panchkula (Haryana) as an extension of the existing National Institute of Ayurveda, Jaipur at a total cost of ₹ 290.54 crore.

(c) The present status of treatment capacity and efficiency of the All India Institute of Ayurveda is given in the Statement-III.

Statement-I

Year-wise activities of Central Council of Research in Ayurveda Sciences (CCRAS) during last 3 years

(i) Activities during 2014-15

The Council continued its activities during the reporting period in the areas of Medicinal Plant Research (Medico-ethno botanical Survey, Pharmacognosy and Cultivation), Drug Standardization, Pharmacological Research, Clinical Research and Literary Research and Documentation Programme. The extension activities comprise of Tribal Health "Care Research Programme, Health care services through Out-Patient

Department (OPD) and In-Patient Departments (IPDs), Special Clinics for Geriatric Health care and Musk Deer Breeding Programme.

Clinical Research Programme

Intra Mural Clinical Research

Under IMR, 7 projects under Clinical Research on 6 diseases/conditions *viz*; Rheumatoid Arthritis, Osteoarthritis (2), Rasayana; Haemorrhoids, Polycystic Ovary Syndrome and Gout have been completed and 16 Projects on 13 diseases/conditions *viz*. Mental Retardation, Type II Diabetes Mellitus, Psoriasis, Generalized Anxiety Disorder, Chronic Bronchitis, Rheumatoid Arthritis, Osteopenia/Osteoporosis, Osteoarthritis, Iron Deficiency Anemia, Bronchial Asthma, Irritable Bowel Syndrome (IBS), Cognitive Deficit and Rasayana across 18 peripheral institutes has been going on.

Collaborative Clinical Research

Under the Collaborative Clinical Research during the period under report, one study on coded Ayurvedic drugs on Mental Retardation has been concluded at all centres and 2 studies *viz* Improvement in quality of life of Breast cancer patients and A Comparative Clinical Evaluation of Kshara sutra prepared manually and by automated machine in "Fistula-in-Ano"- A multi-centric double blind randomized controlled trial have been continued.

Drug Research Programme

Medicinal Plant Research

The council has continued Medicinal Plant Research - Medico-ethno-botanical survey conducted 20 tours in selected areas of 5 states during the survey 39 museum samples, 367.72 Kg. raw drug collected and documented 263 folk claims. A total 18 drugs were studied pharmacognostically, 48 new medicinal plants introduced in demonstrative gardens of Institutes. Besides this, 16 Intra Mural Medicinal Plant Research projects are going on.

Drug Standardization

Under Drug Standardization, 25 singles drugs have been carried out. Besides this; 11 Intra Mural Drug Standardization Research projects are going on.

Pharmacological Research

Toxicological study of 3 coded drugs has been completed and 3 drugs are in progress. Besides this, Biological activity of 1 drug has been completed and 2 drugs are in progress.

Tribal Health Care Research Programme

Under tribal health care research programme, the Council has covered a population of 78,599 out of which 65670 were tribal people belonging to 236 villages and incidental medical aid has been provided to 22,394 patients out of which 18427 patients were tribal people and 140 folk claims/LHTs have been documented.

Literary Research Programme

Under this programme Medico-historical studies, collection and compilation of references relating to drugs and diseases from classical treatises, lexicographic work, contemporary literature and publications related to Ayurveda and modern sciences have been continued. The Council has brought out periodicals viz. Journal of Research in Ayurveda and Siddha, Journal of Drug Research in Ayurveda and Siddha and Journal of Indian Medical Heritage. During the reporting period, 8 books have been published. Besides this, 5 Intra Mural Literary Research projects have been completed and 9 projects have been continued.

AYUSH Research Portal - A web based portal for Research publication in AYUSH is successfully continued and the information being updated periodically. Till date 20190 scientific publications have been uploaded.

IEC Activities

The Council has participated in 25 Arogya Melas, fairs, exhibitions for dissemination of knowledge and awareness of Ayurveda in public and also conducted training programmes, seminars, workshops and conferences at different locations.

(ii) Activities during 2015-16

The Council continued its activities during the reporting period in the areas of Medicinal Plant Research (Medico-ethno botanical Survey, Pharmacognosy and Cultivation), Drug Standardization, Pharmacological Research, Clinical Research and

Literary Research and Documentation Programme. The outreach activities comprise of Tribal Health Care Research Programme, Ayurvedic Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP), Swasthya Rakshan Programme, Health care services through Out-Patient Department (OPD) and In-Patient Departments (IPDs), Special clinics for Geriatric Health care and Musk Deer Breeding Programme.

Clinical Research Programme

Intra Mural Clinical Research (IMR)

Under IMR, 9 projects under Clinical Research on 7 diseases/conditions viz. Type II Diabetes Mellitus, Psoriasis, Mental Retardation, Chronic Bronchitis, Osteoarthritis, Irritable Bowel Syndrome and Cognitive Deficit have been completed and 19 Projects on 15 diseases/conditions viz., Generalized Anxiety Disorder, Rheumatoid Arthritis, Osteopenia/Osteoporosis, Iron Deficiency Anemia, Bronchial Asthma, Rasayana, Chronic Bronchitis, Psoriasis, Type II Diabetes Mellitus, Essential Hypertension, Urolithiasis, Uterine Fibroids, Computer Vision Syndrome, Irritable Bowel Syndrome (IBS) and Mild Bronchial Asthma across 18 peripheral institutes has been going on.

Collaborative Clinical Research

Under the Collaborative Clinical Research during the period under report, one study on coded Ayurvedic drugs on Improvement in quality of life of Breast cancer patients has been concluded at all centres and 3 studies viz. Comparative clinical evaluation of Ksharasutra prepared manually and by automated machine in fistula-in-ano (Bhagandara), Collaborative Multicentric Clinical Trial to study the Effect of Ayush Rasayana (A&B) On Ageing In Apparently Healthy Elderly Subjects and Development and validation of Prakriti Assessment Questionnaire have been continued.

Drug Research Programme

Medicinal Plant Research

The council has continued Medicinal Plant Research - Medico-ethno-botanical survey conducted 18 tours in selected areas of 5 States during the survey 83 museum samples, 850.55 Kg. raw drug collected and documented 139 folk claims. 41

new medicinal plants introduced in demonstrative gardens of Institutes. Besides this, 3 Intra Mural Medicinal Plant Research projects have been completed and 16 projects are going on.

Drug Standardization

Under Drug Standardization, 54 singles drugs and 28 compound formulations have been carried out. Besides this, One Intral Mural Drug Standardization Research project has been completed and 10 projects are going on.

Pharmacological Research

Under this programme, 5 Intra Mural Pharmacological Research Projects have been completed and 10 projects are going on.

Literary Research Programme

Under this programme Medico-historical studies, lexicographic work, contemporary literature and publications related to Ayurveda and modern sciences have been continued. The Council has brought out periodicals viz. Journal of Research in Ayurveda and Siddha, Journal of Drug Research in Ayurveda and Siddha and Journal of Indian Medical Heritage. During the reporting period, 8 books have been published. Besides this, 3 Intra Mural Literary Research projects have been completed and 6 projects have been continued.

AYUSH Research Portal - A web based portal for Research publication in AYUSH is successfully continued and the information being updated periodically. Till date 21839 scientific publications have been uploaded.

Outreach Activities

- **Tribal Health Care Research Programme :** Under tribal health care research programme, the Council has covered a population of 1,24,577 out of which 1,08,311 were tribal people belonging to 341 villages and incidental medical aid has been provided to 43,153 patients out of which 36,031 patients were tribal people and 252 folk claims/LHTs have been documented.
- **Ayurvedic Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP) :** This programme has been executed through

20 CCRAS institutes in 18 states. This programme has been initiated during the month of November, 2015. A total 51001 Scheduled Castes population surveyed, 105 villages/colonies covered through 685 tours in 18 states and medical aid provided to 18081 scheduled castes patients.

- **Swasthya Rakshan Programme :** This programme has been executed through 21 CORAS Institutes in 19 States. This programme has been initiated during the month of November, 2015. A total 96 villages/colonies covered through 793 tours in 19 States and medical aid provided to 24308 patients.
- **Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) in 3 districts Surendra Nagar (Gujarat), Bhilwara (Rajasthan) and Gaya (Bihar).**

This programme has been initiated in 2 districts *i.e.* Surendra Nagar (Gujarat) and Bhilwada (Rajasthan) and is going to initiated shortly in one district *i.e.* Gaya (Bihar).

IEC Activities

The Council has participated in 47 Arogya Melas, fairs exhibitions for dissemination of knowledge and awareness of Ayurveda in public and also conducted training programmes, seminars, workshops and conferences at different locations.

Patent and Commercialization

CCRAS has developed an anti-diabetic drug AYUSH-82 and the License has been granted through National Research Development Corporation (NRDC), New Delhi to three firms.

(iii) Activities during 2016-17

The Council continued its activities during the reporting period in the areas of Medicinal Plant Research (Medico-ethno botanical Survey, Pharmacognosy and Cultivation), Drug Standardization, Pharmacological Research, Clinical Research and Literary Research and Documentation Programme. The outreach activities comprise of Tribal Health Care Research Programme, Ayurvedic Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP), Swasthya Rakshan Programme,

Health care services through Out-Patient Department (OPD and In-Patient Departments (IPDs) and Special clinics for Geriatric Health care. Programme-wise achievements are as under:

Clinical Research Programme

Intra Mural Clinical Research (IMR)

Under IMR, 10 Clinical Research projects on 10 diseases/conditions *viz.* Generalized Anxiety Disorder, Rheumatoid Arthritis, Osteopenia/ Osteoporosis, Iron Deficiency Anaemia, Bronchial Asthma, Rasayana, Chronic Bronchitis, Irritable Bowel Syndrome, Computer Vision Syndrome and Type II Diabetes Mellitus have been completed and 17 Projects on 14 diseases/conditions *viz.*, Psoriasis, Essential Hypertension, Urolithiasis, Uterine Fibroids, Rheumatoid Arthritis, Type II Diabetes Mellitus, Hemorrhoids, Obesity, Osteoarthritis, Gout, Osteopenia/ Osteoporosis and Cervical Spondylosis, Cognitive Deficit and Mild Bronchial Asthma have been going on.

Collaborative Clinical Research

Under the Collaborative Clinical Research during the period under report, 4 projects *viz.* Development of Bio-medical instrumentation for Ksharasutra chamber for preparation of standardized Ksharasutra with IIT, New Delhi; Clinical study of 'AYUSH Rasayana A & B' in Elderly subjects with AIIMS, New Delhi and BHU, Varanasi; C1-Oil for wound healing with AIIMS, New Delhi and Development and validation of Prakrit Assessment Questionnaire/Scale with reputed organizations have been going on.

Drug Research Programme

Medicinal Plant Research

The council has continued Medicinal Plant Research - Medico-ethno-botanical survey conducted 20 tours, in selected areas of 5 states during the survey 34 museum samples, 984.27 Kg. raw drug collected and documented 127 folk claims. 84 new medicinal plants introduced in demonstrative gardens of Institutes. Besides this, 5 Intra Mural Medicinal Plant Research projects have been completed and 12 projects are going on.

Drug Standardization

Under Drug Standardization, 88 singles drugs and 33 compound formulations have been carried out. Besides this, 3 Intra Mural Drug Standardization Research projects have been completed and 7 projects are going on.

Pharmacological Research

Under this programme, one Intra Mural Pharmacological Research Project has been completed and 14 projects are going on.

Literary Research Programme

Under this programme, Medico-historical studies, lexicographic work, contemporary literature and publications related to Ayurveda and modern sciences have been continued. The Council has brought out periodicals viz. Journal of Research in Ayurveda and Siddha, Journal of Drug Research in Ayurveda and Siddha and Journal of Indian Medical Heritage. During the reporting period, 9 books have been published. Besides this, 3 Intra Mural Literary Research projects have been completed and 7 projects have been continued.

AYUSH Research Portal - A web based portal for Research publication in AYUSH is successfully continued and the information being updated periodically. Till date 23012 scientific publications have been uploaded.

Outreach Activities**Tribal Health Care Research Programme**

Under tribal health care research programme, the Council has covered a population of 1,23,632 out of which 1,13,067 were tribal people belonging to 366 villages and incidental medical aid has been provided to 46,345 patients out of which 40,416 patients were tribal people and 195 folk claims/LHTs have been documented.

Ayurvedic Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP)

This programme has been executed through 20 CCRAS institutes in 18 States. A total 154263 Scheduled Castes population surveyed, 220 villages/colonies covered through 3040 tours in 18 states and medical aid provided to 79269 scheduled castes patients.

Swasthya Rakshan Programme

This programme has been executed through 21 CCRAS Institutes in 19 States. A total 153 villages/colonies covered through 3853 tours in 19 States and medical aid provided to 114941 patients.

Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) in 3 districts Surendra Nagar (Gujarat), Bhilwada (Rajasthan) and Gaya (Bihar).

This programme has been executed in 3 districts *i.e.* Surendra Nagar (Gujarat), Bhilwada (Rajasthan) and Gaya (Bihar). A total 31910 patients were enrolled for selected non communicable diseases, 77565 patients were enrolled/ registered for Yoga Classes and 760 camps were conducted.

Ayurvedic Health Centres under North East Plan

The Ayurvedic Health Centres under NE Plan has been initiated in 20 centres in 3 States. In Assam a total 8746 patients were attended at 10 Ayurvedic Health Centres through RARIGID, Guwahati, in Sikkim a total 5964 patients were attended at 4 Ayurvedic Health Centres through RARI, Gangtok and in Arunachal Pradesh a total 8631 patients were attended at 6 Ayurvedic Health Centres through RARI, Itanagar.

IEC Activities

The Council has participated in 43 Arogya Melas, fairs, exhibitions for dissemination of knowledge and awareness of Ayurveda in public and also conducted training programmes, seminars, workshops and conferences at different locations.

Statement-II

The details of Extra Mural Research Projects in respect of Ayurveda during the last three years 2014-15

Sl. No.	Name of Principal Investigator & Address	Title	Fund released (1st Installment)
1	2	3	4
1.	Dr. Surendra H. Bodake, Associate Professor, SLT Institute of Pharma. Sciences, G.G. Vishwavidyalaya (A Central University), Bilaspur (CG)-495009	Search for novel Anti-cataract agents: phytochemical and pharmacological investigation of unexplored medicinal plants of Chhattisgarh State	₹ 10,99,040/-

1	2	3	4
2.	Dr. Akshay Anand, Associate Professor, Post Graduate Institute of Medical Education and Research (PGIMER) Neuroscience Research Laboratory Sector-12, Chandigarh-160012	The neuroprotective effect of herbal extracts derived from Allium cepa in mouse of retinal ganglion cells (RGC) damage	₹ 7,90,400/-
3.	Dr. B. Duriaswamy, JSS College of Pharmacy, Rocklands, Ootacamund, Nilgiris district, Tamil Nadu- 643001	The mechanism of Action of Certain Ayurvedic Medicinal Plants on Alzheimer's by Dipeptidyl Peptidase-4 Inhibition using Herbs	₹ 12,41,069/-
4.	Dr. Sharmistha Dey, Assistant professor, Department of Biophysics, All India Institute of Medical sciences, New Delhi-110029	Potential anti-oxidant effect of selected Ayurvedic herbs in Parkinson and Alzheimer disease	₹ 9,02,800/-
2015-16			
5.	Dr. Yogesh Kulkarni, SVKM'S NMIMS (Deemed-To-be University), Vile Parle, Mumbai-400056	"Preclinical Studies on Triphala for its Possible Effects in Treatment of Microvascular Complications of Diabetes"	₹ 880800/-
6.	Dr. Renuka Munshi, Associate Professor & In - charge, Dept. of Clinical Pharmacology, TN Medical College & BYL Nair Ch. Hospital, Dr. AL Nair Road, Mumbai Central, Mumbai 400008	"Safety evaluation of two important herbo-mineral formulations used in Ayurvedic practice"	₹ 2208400
7.	Dr. Joy Verghese and Dr. Tenson Antony, Care	"Validation of safety, Efficacy and Quality and Proration of	₹ 2713360

1	2	3	4
	Keralam Ltd, KINFRA Park-680309 Kerala	Drug Master File of Classical Ayurvedic Formulation Vasagud uchyadi Kashayam and Katakakhadioradi kashyam"	
8.	Dr. Padmaja Marathe, MD Professor (Additional), Department of Pharmacology and Therapeutics, Seth GS Medical College & KEM Hospital, Parel, Mumbai 400 012	"Evaluation of Role of withania somnifera and Celastras puniculatus in Animal Models of Alcohol Addiction"	₹ 1363600
9.	Mr. Ravi Munduaru, M.Sc., Research Officer, Department of Toxicology, Sri Dharmasthala Manjunatheshwar Educational Society (R), Ujire, Centre for Research in Ayurveda and Allied Sciences, Kuthpady, Udupi-574118	"Safety evaluation of two important herbo-mineral formulations used in Ayurvedic practice"	₹ 1185780
10.	Dr. Supriya Bhalerao, Interactive Research School for Health Affairs, Bharati Vidyapeeth University, Dhankawadi, Pune-Satara Road, Pune-411043	"Evaluation of Triphala and Trimad for their effects on adipocytes biology and lipid metabolism"	₹ 827600

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11.	Dr. Karthikeyan Ramalingam, Ph.D., Associate Professor, School of Life Sciences, B.S. Abdur Rahman University, Vandalur. Chennai-600048	"Antimicrobial Efficacy and Mechanisms of Herbal Extracts Fractions (Traditional Herbal Tooth Powder Formula) on Biofilm Forming Cariogenic Microorganisms"	₹ 1028000
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1	2	3	4
12.	Dr. Swati Madan, Assistant Professor, Amity University, Sector-125, Noida-201313	Cytotoxic, antitumor and anti angiogenesis evaluation of cow urine (Go-mutra) based medicinal plant extract against Ehrlich ascites cells bearing mouse	₹ 235000
13.	Dr Rabi Narayan Acharaya, Institute for Post Graduate Teaching & Research in Ayurveda, Gujrat Ayurved University, Jamnagar	Experimental and Clinical Studies on Nagapheny (Opuntia elatior mill) an anukta dravya (extra pharmacopial. drug with special reference to its haematinic activity	₹ 1274840
14.	Dr. Sujata Law, Assistant Professor (Stem Cell Biology) Calcutta School of Tropical Medicine, 108, Chittaranjan Avenue, Kolkata-700073	An experimental approach towards Bone marrow and microenvironment in Leukemia by using Ashwagandha (withania somifera) and Bhringaraj (Eclipta alba): Two candidate inhibitors of Hedgehog and NF-kB pathways	₹ 710800
TOTAL			₹ 1,64,61,489

Statement-III

Present Status of Treatment capacity and efficiency of All India Institute of Ayurveda

1. Out Patient Department (OPD) started in August, 2015 at All India Institute of Ayurveda

Sl. No.	Year	Total No. of Patients
1.	1st August 2015 - 31st March 2016	42746
2.	1st April 2016 - 31st March 2017	136756
3.	1st April to June 2017	43678
TOTAL		223180

2. Specialty OPDs at AHA

Sl. No.	Clinical Specialty
1.	Neurological and Degenerative Disease Care Unit
2.	Rheumatology and Musculoskeletal Care Unit
3.	Diabetes and Metabolic / Allergic Disorders Care Unit
4.	Shalya Chikitsa Kshara Evum Anushastra Karma (Surgical OPD including Parasurgical Treatment for Anorectal Diseases)
5.	Shalakya (Eye and ENT care Clinic)
6.	Stri Evam Prasuti Roga Clinic (Women Health Care Clinic)
7.	Bala Roga Clinic (Child Health Care Clinic)
8.	Yoga
9.	Panchakarma Clinic Comprising of nearly 18-20 specific procedures for several disorders in adults as well as Children.
10.	KriyaKalpa Comprising of nearly 18 specific procedures for specific treatment of Eye and ENT disorders.
11.	Integrated AYUSH Clinic including OPDS of Unani, Homoeopathy and Siddha
12.	Diabetic Retinopathy Clinic - Monthly clinic for screening of Diabetic retinopathy
13.	Cancer Screening Clinic - Weekly clinic for Screening of female patients for Breast and Cervical Cancers
3.	IPD started in October, 2016 which is gradually being expanded as per we are getting the possession of Hospital Building from construction Agency.
4.	Laboratory Facilities comprising of ECG, Hematology, Biochemistry and Pathological investigations.
5.	Very basic of fundamental principles of Ayurveda <i>i.e.</i> promoting health and prevention of diseases is accomplished by imparting consultancy services through Yoga, lifestyle and several awareness programs and camps conducted by AHA from time to time.