



Annual Report

वार्षिक रिपोर्ट
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स्पाइसेस बोर्ड
भारत

SPICES BOARD INDIA

Ministry of Commerce & Industry
Government of India
COCHIN - 682 025



EXECUTIVE SUMMARY

Spices Board has completed one more successful year in serving the Indian spice industry by promoting exports, supporting production development of cardamom (small & large) and pepper, improving quality of spices through post harvest improvement programmes and developing infrastructure facilities for value addition of spices.

Despite the global economic recession, spices export has reached an all time high both in quantity and value. During the financial year 2009-10, a total volume of 5,02,750 tonnes of spices and spice products valued ₹ 5,560.50 crores (US\$ 1,173.75 million) have been exported from the country as against 4,70,520 tonnes valued ₹ 5,300.25 crores (US\$ 1,168.40 million) in the previous year, there by registering an increase of seven per cent in volume, five per cent in rupee value and 0.5 per cent in dollar terms of value.

During 2009-10, the production of cardamom (small) has been 10,075 tonnes and that of cardamom (large) was 4,180 tonnes.

The average domestic prices of pepper, cardamom (small), cardamom (large), ginger, turmeric, garlic, fennel, ajwan seed, vanilla, clove, nutmeg, mace and saffron have increased considerably and prices for chilli, cumin, dill seed and tamarind have shown marginal increase compared to last year. In fact the average auction price of cardamom (small) has recorded an all time high of ₹ 859.43 per kg against the previous highest of ₹ 622.39 per kg in 2001-02. However, prices of seed spices like coriander, celery and fenugreek have shown marginal decline during the year.

The implementation of XI Plan schemes viz., Replantation and rejuvenation of cardamom plantations, export oriented production and post harvest improvement of spices, export development and promotion, Export oriented research, Quality improvement and Human resources development and works were continued during the year. The total financial outlay for the above schemes during the year was ₹ 62.00 crores and financial achievement is ₹ 62.168 crores.

During 2009-10, an area of 2,863 hectares were brought under replantation of cardamom (small) with an expenditure of ₹10.675 crores and 2,160 hectares under rejuvenation programme with an expenditure of ₹ 2.654 crores. In the case of cardamom (large), 942 hectares were brought under replanting and 617 hectares under rejuvenation with an expenditure of ₹1.995 crores and ₹0.351 crores respectively.

Under the scheme of Export oriented production and post harvest improvement of spices, various programmes such as providing assistance for irrigation and land development, providing rain water harvesting devices, improved curing devices etc., for small and large cardamom, spices cultivation in North Eastern region, post harvest improvement, organic farming of spices etc., were implemented during 2009-10 with an expenditure of ₹17.599 crores.

In the scheme of Export development and promotion of spices, programmes for adoption of hi-tech in spice processing, setting up/upgradation of in house quality control lab, quality certification, sending



business samples abroad, printing promotional brochure, setting up common infrastructure facilities for grading, processing, packing, warehousing etc., participation in international fairs/exhibitions etc., were implemented with an expenditure of ₹19.126 crores during 2009-10.

Spices Board is implementing the pepper re-plantation and rejuvenation programme in Idukki district of Kerala, which is the major pepper producing region in India. The National Horticulture Mission supports this programme with a financial assistance of ₹ 120 crores. For a similar programme in Wynad and North Eastern states, the Department of Commerce has allotted an amount of ₹ 53.08 crores.

During 2009-10, the Board participated in 19 international fairs in different countries and 16 domestic fairs.

Multi media campaign to create awareness on scientific post harvest practices in seed spices were conducted in Jodhpur district of Rajasthan and Guna district of Madhya Pradesh.

Organized the biennial event World Spice Congress at New Delhi. A record turnover of 163 international delegates and 291 Indian delegates participated in the event.

The Indian Cardamom Research Institute of the Board has continued the activities on crop improvement, crop management, crop protection, biotechnology, post harvest technology and transfer of technology.

The Quality Evaluation Laboratory of the Board at Cochin has moved to a new building with world-class facilities. The laboratory analyzed 56,617 samples during the year for various parameters including Pesticide residues, Aflatoxin, illegal dyes, such as Sudan dye I-IV, Rhodamine, Para Red etc, in chilli & chilli products and turmeric powder. Lab conducted four training programmes for the technical personnel of the spice industry on analysis of spices and spice products. Lab also participated in the check sample/validation programmes of ASTA and IPC.

Under ASIDE scheme approval has been obtained for setting up of Quality Evaluation Laboratory cum Training center at Tuticorin. The setting up of Quality Evaluation Laboratory cum Training center at Guntur, New Delhi and Chennai under ASIDE scheme is progressing.

The Board implemented the Official language policy of the Government of India successfully. Various programmes in line with the Annual programme issued by the Department of Official Language were carried out during the year.



I. CONSTITUTION AND FUNCTIONS

Constitution of Spices Board

The Spices Board Act, 1986, (No.10 of 1986) enacted by Parliament provide for the constitution of a Board for the development of export of spices and for the control of cardamom industry including control of cultivation of cardamom and matters connected therewith. The Central Government by notification in the official gazette constituted, for the purpose of this Act, Spices Board, which came into being on 26.2.1987.

The Spices Board consists of:

- (a) Chairman;
- (b) Three members of Parliament of whom two shall be from among elected by the House of the People and one from among those elected by the Council of States;
- (c) Three members to represent the Ministries of the Central Government dealing with:
 - (i) Commerce;
 - (ii) Agriculture; and
 - (iii) Finance;
- (d) Seven members to represent the growers of spices;
- (e) Ten members to represent the exporters of spices;
- (f) Three members to represent major spice producing States;
- (g) Four members one each to represent:
 - (i) The Planning Commission;
 - (ii) The Indian Institute of Packaging, Mumbai;
 - (iii) The Central Food Technological Research Institute, Mysore;
 - (iv) Indian Institute of Spices Research, Calicut;
- (h) One member to represent spices labour interests.

(The list of members of Spices Board during the year is at Annex-I)

Functions of the Board

The Spices Board Act, 1986, has assigned the following functions to the Spices Board.

**The Board may -**

- (i) Develop, promote and regulate export of spices;
- (ii) Grant certificate for export of spices;
- (iii) Undertake programmes and projects for promotion of export of spices;
- (iv) Assist and encourage studies and research, for improvement of processing, quality techniques of grading and packaging of spices;
- (v) Strive towards stabilization of prices of spices for export;
- (vi) Evolve suitable quality standards and introduce certification of quality through “Quality Marking” of spices for export;
- (vii) Control quality of spices for export;
- (viii) Give licenses, subject to such terms and conditions as may be prescribed, to the manufacturers of spices for export;
- (ix) Market any spice, if it considers necessary in the interest of promotion of export;
- (x) Provide warehousing facilities abroad for spices;
- (xi) Collect statistics with regard to spices for compilation and publication;
- (xii) Import with prior approval of the Central Government any spice for sale; and
- (xiii) Advise the Central Government on matters relating to import and export of spices.

The Board may also –

- (i) Promote co-operative effort among growers of cardamom;
- (ii) Ensure remunerative returns to growers of cardamom;
- (iii) Provide financial or other assistance for improved methods of cultivation and processing of cardamom, for replanting cardamom and for extension of cardamom growing areas;
- (iv) Regulate the sale of cardamom and stabilization of the prices of cardamom;
- (v) Provide training in cardamom testing and fixing grade standards of cardamom;
- (vi) Increase the consumption of cardamom and carry on propaganda for that purpose;
- (vii) Register and license brokers (including auctioneers) of cardamom and persons engaged in the business of cardamom;
- (viii) Improve the marketing of cardamom;
- (ix) Collect statistics from growers, dealers and such other persons as may be prescribed on any matter relating to the cardamom industry, publish statistics so collected or portions thereof, extracts there from;



- (x) Secure better working conditions and the provision and improvement of amenities and incentives for workers; and
- (xi) Undertake, assist or encourage scientific, technological and economic research.

Spices under the purview of the Board

The following 52 spices are listed in the Schedule of Spices Board Act:

1 Cardamom	19 Kokkam	36 Hyssop
2 Pepper	20 Mint	37 Juniper berry
3 Chilli	21 Mustard	38 Bayleaf
4 Ginger	22 Parsley	39 Lovage
5 Turmeric	23 Pomegranate seed	40 Marjoram
6 Coriander	24 Saffron	41 Nutmeg
7 Cumin	25 Vanilla	42 Mace
8 Fennel	26 Tejpat	43 Basil
9 Fenugreek	27 Pepper long	44 Poppy seed
10 Celery	28 Star anise	45 All-Spice
11 Aniseed	29 Sweet flag	46 Rosemary
12 Bishops weed	30 Greater Galanga	47 Sage
13 Caraway	31 Horse-radish	48 Savory
14 Dill	32 Caper	49 Thyme
15 Cinnamon	33 Clove	50 Oregano
16 Cassia	34 Asafoetida	51 Tarragon
17 Garlic	35 Cambodge	52 Tamarind
18 Curry leaf		

[In any form including curry powders, spice oils, oleoresins and other mixtures where spice content is predominant]

The Board has three statutory committees as under:

- (i) Executive Committee
- (ii) Research & Development Committee for Cardamom
- (iii) Market Development Committee for Spices



2. ADMINISTRATION

Personnel of the Board

Shri V.J.Kurian, IAS continued as Chairman of the Board during the period under report. Shri S. Kannan, Director (Mktg) held additional charge of Secretary w.e.f. 01.11.2009 consequent on retirement of Smt.K. Lekshmikutty, Deputy Director (Vig) & Secretary i/c on superannuation. Shri S.Kannan, Director (Mktg), Dr.J.Thomas, Director (Res) and Dr.Charles J Kithu, Director (Fin) continued in their respective posts during the year. Consequent on retirement of Shri R. Chandrasekhar, Director (Dev) on superannuation, Shri H.S. Srinivasa was appointed as Director (Dev) on ad-hoc basis w.e.f. 1.2.2010.

As on 31st March 2010, the staff strength of Spices Board was 483 consisting of 84 Group A, 92 Group B, 269 Group C and 38 Group D employees, including Group D Temporary Status.

Reservation for SC/ST/OBC in appointments and promotions

The Board is properly implementing the post-based reservation roster for SC/ST/OBC. The instructions issued by the Government from time to time in this regard are also strictly adhered to. As on 31st March, 2010 there were 241 employees belong to SC, ST and OBC categories.

The Board is also maintaining reservation roster for persons with disabilities and filled up the vacancy of Caner with a candidate who is visually handicapped, as per rules during the year under report.

Welfare of women

During the period under report, the total strength of women employees in the Board in Group A, B, C and D categories was 105. The grievances of women employees are timely and properly attended to. A women officer of the Board has been appointed as "Women Welfare Officer" to sort out the difficulties/problems, if any, or to bring them to the notice of the higher authorities along with suggestions for possible solutions.

Meetings of the Board

During the period under report, three meetings of the Board were convened on 29.6.2009, 15.1.2010 and 30.03.2010.

Offices of the Board

The Head Office of the Board is located in Cochin, Kerala . The following offices of the Board functioned during the year:-

Marketing

Spices Board is having its Marketing offices at Bodinayakanur, Chennai, Tuticorin, Bangalore, Mumbai, Ahmedabad, New Delhi, Kolkatta, Gangtok, Guwahati, Chhindwara and Guntur.



Development

- (1) Regional offices at Nedumkandam, Kumily, Kalpetta, Saklespur, Guntur, Warangal, Jodhpur, Ahemedabad, Lucknow, Gangtok, Guwahati,
- (2) Zonal offices at Rajakumari, Cheruthoni, Vandanmettu, Kattappana, Kumily, Nedumkandam, Poopara, Chickmagalore, Madikeri, Shimoga, Mangan, Jorethang, Kalimpong, Aizawl, Itanagar, Agarthala and Tadong.
- (3) Forty five Field offices located in the states of Kerala, Karnataka, Tamil Nadu and North Eastern Region.

The Board is also maintaining five departmental nurseries in Karnataka.

Research

Indian Cardamom Research Institute (ICRI) at Myladumpara (Kerala) and the Regional Research Stations at Tadong (Sikkim), Saklespur (Karnataka) and Thadiyankudisai (Tami Nadu) continued its functioning.

Plantation labour welfare

The Board continued the following schemes under the Plantation Labour Welfare during the year for the benefit of the labourers engaged in cardamom plantations.

(i) Award of Educational stipend to the children of cardamom estate workers

The scheme is applicable to students pursuing post S.S.L.C. education. Under the scheme, Spices Board provides financial assistance to eligible children of the cardamom plantation workers, subject to the fulfillment of the terms and conditions fixed by the Board.

During 2009-10, an amount of ₹ 2,97,550.00 was distributed to the children of cardamom estate workers under educational stipend scheme in Kerala, Karnataka and Tamil Nadu regions. The details are given below:

Sl. No.	State	No. of students	Amount spent in Rupees
1	Kerala	224	1,20,650
2	Karnataka	328	1,62,750
3	Tamil Nadu	21	14,150
	Total	573	2,97,550

(ii) Grant-in-aid to hospitals/educational institutions

The grants are given for improvement of essential facilities in the hospitals, schools and colleges located in the cardamom growing areas by way of providing drinking water facilities, toilets, procurement of furniture, laboratory equipments, clinical equipments, library books etc. The grant-in-aid could also be considered for conducting medical camp as a welfare measure for the cardamom plantation labourers.



During the year under report, ₹ 6.05 lakhs was paid to nine institutions. The details are as follows:

Sl. No.	State	No. of Institutions	Amount spent in ₹
1	Kerala	6	4,45,000
2	Karnataka	3	1,60,000
3	Tamil Nadu	Nil	Nil
	Total	9	6,05,000

Implementation of Right to Information Act

Board has successfully implemented the Right To Information Act 2005. Board has designated the Deputy Director (Planning & Co-ordination) as the Central Public Information Officer and the Assistant Director (Statistics) as Assistant Central Public Information Officer. In addition Board has designated 14 Public Information Officers in the field units and seven Public Information Officers in the Head quarter to disseminate information under the respective functional area. Secretary, Spices Board is designated as the Appellate Authority.

Board has disclosed every information required to be disclosed suo motu in such form and manner, which is accessible to the public under Section 4(1) of RTI Act 2005 through the website. During 2009-10, under 28 applications have been received under RTI Act and information disseminated to all the cases within the stipulated time.

Implementation of Official Language Policy

During 2009-10, the following programmes/activities were undertaken for the effective implementation of the Official Language Policy of the Government of India in the Board:-

- (1) Quarterly meetings of the Official Language Implementation Committee (OLIC) were convened on 30.06.2009 (for April-June), 29.09.2009 (for July-September), 30.12.2009 (for October-December) and 31.03.2010 (for January-March). All these meetings were presided over by the Chairman and attended by the higher officials of the Board and various programmes connected with the implementation of the Official Language Policy were chalked out.
- (2) Four Hindi workshops were arranged for the staff in Head Office, Kochi during June 2009, August 2009, November 2009 and February 2010. Total 49 staff members (32 Senior Clerks and 17 Stenographers) were imparted Hindi training through these workshops.
- (3) Purchase and supply of the English-Hindi dictionary to the entire staff members of the Board was completed.
- (4) Purchased Hindi books/CDROM for a total sum of ₹ 7926/- for the library.
- (5) Two staff members were nominated for Hindi (Prabodh) training under the Hindi Teaching Scheme and they successfully completed the training programme. Eligible incentive has been given to these staff members.
- (6) Ensured participation of the officials and staff members in various programmes as well as meetings/seminars/workshops conducted by the Kochi TOLIC and its member organizations. Secretary



and Assistant Director (OL) attended the TOLIC meeting on 27th May 2009. The Assistant Director (OL), Senior Hindi Translator and Junior Hindi Translator attended the Hindi workshop conducted by the Kochi TOLIC on 17th July 2009. The Junior Hindi Translator attended the Hindi seminar arranged by FACT, Udyogamandal on 24th August 2009.

- (7) Hindi Day 2009 was observed on 14th September 2009 in Head Office.
- (8) Hindi Fortnight was celebrated during 14-27 September 2009. Shri Kesavendra Kumar IAS, Sub Collector, Ernakulam inaugurated the celebrations. Various Hindi competitions were conducted for the staff and their children. Valedictory function of the fortnight celebrations was arranged on 16th February 2010 and Shri Ajith Patil IAS, Deputy Collector, Fort Kochi was the Chief Guest.
- (9) A special programme 'VARTALAP' Hindi conversation competition was arranged for the High school students in and around Kochi in connection with the Hindi fortnight celebrations on 13th January 2010. The prize winners were awarded with cash prizes and certificates on 16th February 2010 during the valedictory function of the Hindi fortnight celebrations.
- (10) A glossary on administrative and scientific terms used in Board's offices was brought out. The Secretary, Spices Board released the same at the inaugural function of Hindi Fortnight Celebration held on 14th September 2009 by handing over a copy to Shri Kesavendra Kumar IAS, Sub collector, Ernakulam. Copies of the Glossary were distributed to entire staff members of the Board, Kochi TOLIC and its member organizations, to the Ministry and Department of OL.
- (11) The Official Language inspection of the Regional Office, Jodhpur was conducted on 4th December 2009. The Assistant Director (OL) conducted the inspection and the shortcomings in implementation of the OL policy were rectified.
- (12) Hindi was used as an effective medium in the quality awareness campaigns arranged in Rajasthan and Madhya Pradesh on seed spices. Banners, handbills and other materials were prepared in Hindi for distribution to the farmers and other stakeholders in this region. The Assistant Director (OL) made a power point presentation in Hindi on the quality aspects of seed spices in "Marwar Krishi Utsav '09" in Joshpur on 8th December 2009.
- (13) The Official Language Implementation Committee decided to update the Hindi version of Board's website and the work commenced.
- (14) The work connected with standardization of Hindi names of spices, which are coming under the jurisdiction of the Board is in progress.
- (15) As a follow up to the assurance given to the Committee of Parliament on Official Language, Board's Reception desk and Canteen have been identified as two areas for doing the entire work in Hindi. Necessary instructions in this regard have been issued.
- (16) Publication of the Hindi monthly magazine 'Spice India' and the bilingual weekly bulletin 'Spices Market' was continued. The information disseminated through these publications were included in the official website of the Board.



3. FINANCE AND ACCOUNTS

The schemes, projects and programmes of the Board under Plan are financed through grants and subsidies from the Government of India. Non-plan expenditure on Administration is met mainly through Internal and Extra Budgetary Resources (IEBR) generated from various activities of the Board.

The approved budget for the Board during 2009-10 was ₹ 6,200.00 lakhs under Plan and ₹ 925.00 lakhs under Non-plan. An amount of ₹ 3,200.00 lakhs against grants, ₹ 2,400.00 lakhs against subsidies, ₹ 600.00 lakhs towards provision for North Eastern Region Plan budget and ₹ 200.00 lakhs under Non-plan scheme have been received by the Board from the Government during 2009-10. The Board generated IEBR of ₹ 870.81 lakhs from analytical charges for quality testing services rendered by the Quality Evaluation Laboratory, sale of seedlings from nurseries, farm products of Research farms, subscription and advertisement charges, exporters' registration fee etc., under Plan schemes and ₹ 238.90 lakhs from internal revenue from advances to employees etc., under Non-plan in 2009-10. The total expenditure of the Board under Plan and Non-plan during the year 2009-10 was ₹ 7,643.02 lakhs, the breakup of which is given below:

Head of Account	Budget Grants (₹ Lakhs)	Actual Expenditure (₹ Lakhs)
Non-plan (including IEBR)	925.00	1,426.20
Plan		
Export Oriented Production	2,000.00	1,759.89
Export Development & Promotion	1,800.00	1,912.58
Export Oriented Research	400.00	476.52
Quality Improvement	400.00	398.13
HRD & Works	100.00	102.13
Special purpose fund for Replanting/ Rejuvenation of cardamom plantations	1,500.00	1,567.57
Total (Plan)	6,200.00	6,216.82
Total (Non-Plan & Plan)	7,125.00	7,643.02



The Board has also been implementing certain ongoing projects and programmes with grants received from other Government Departments and National agencies such as, NHM, ICAR, SHM, ASIDE (State Cell) etc. The details of such projects, grants received and expenditure incurred during 2009-10 are given below:

Programmes	Grants (₹ Lakhs)	Expenditure (₹ Lakhs)
Western Ghat Development Programme	17.04	17.04
ASIDE (State cell)	852.00	1322.16
Eco Friendly Neem Project	6.13	15.76
Mobile Agri Clinic, SHM, Idukki	4.00	2.81
NHM, Karnataka, production of pepper rooted cuttings	6.00	9.55
Estt. Bio-control production centre, SHM, Kerala	20.00	49.14
ICAR-AICRPS	6.64	1.19
Development of Microsatellite Marks	10.90	6.66
NHM pepper production in Idukki District	1,400.00	591.05
'DUS' Test Centre at ICRI	0.85	—
Total	2,323.56	2,015.36



4. EXPORT ORIENTED PRODUCTION AND POST HARVEST IMPROVEMENT

Spices Board is responsible for the overall development of Cardamom (Small & Large) especially in improving production and productivity. Post Harvest Improvement of spices is also vested with Spices Board. For achieving these objectives, Board is implementing a number of developmental programmes contained in two schemes viz., “Special Purpose Fund for Replantation and Rejuvenation of Cardamom Plantations (Small and Large)” and “Export Oriented Production and Post Harvest Improvement of Spices”. In addition to this, Board is implementing a Project for Development of Pepper in Idukki District of Kerala assisted under National Horticulture Mission(NHM).

The activities proposed under the schemes/project are implemented through nine regional offices, 17 zonal offices and 40 field offices functioning under the Development department of Spices Board. Board maintains five departmental nurseries and farms in the major cardamom growing areas of Karnataka to cater the planting material requirement of cardamom growers.

Special Purpose Fund for replantation and rejuvenation of cardamom (small & large) plantations

The objective of the scheme is to address the issue of replanting/rejuvenation of the old and uneconomic plantations of cardamom small and large in the States of Kerala, Karnataka, Tamil Nadu and Sikkim and Darjeeling district of West Bengal. Production and distribution of disease free, healthy and quality planting materials were also taken up by certified nurseries opened in growers field with the technical supervision of the officers of the Board. Beneficiaries covered under the scheme were given financial assistance as subsidy on completion of the programmes.

The programmes implemented under the scheme during 2009-10 are given below :

Cardamom (small)

Small cardamom is grown mainly in the Western Ghats of Kerala, Karnataka and Tamil Nadu. The total area under cardamom during 2009-10 was 71110 hectares with an estimated production 10075 tonnes. Cardamom requires humid and moderately cool climate, filtered light obtained from tree canopy, humus rich soil, well distributed rainfall and protection from heavy wind. Majority of the cardamom holdings belong to the small and marginal category. Programmes implemented towards improving production and productivity of cardamom small are given below :

(i) Production and supply of quality planting materials

(a) Departmental nursery

The seedlings produced in the five departmental nurseries are supplied to growers on a no loss no profit basis. During 2009-10, the nurseries produced 4.60 lakhs cardamom seedlings/suckers for distribution to cardamom growers.



(b) Certified nursery

In order to produce disease free, healthy and quality planting materials certified nurseries are opened in growers' field under the technical supervision/guidance of Spices Board. In Karnataka, the planting materials are produced through bed nurseries, poly bag nurseries and sucker nurseries by giving ₹1.25 per planting material as subsidy whereas in Kerala it is produced through sucker multiplication nurseries providing ₹1.75 per sucker. During the season 198.25 lakhs planting materials of cardamom were produced in the States of Kerala, Tamil Nadu and Karnataka through certified nurseries.

(ii) Replanting

This programme is intended to encourage small and marginal growers to take up replantation of old, senile and uneconomic plantations. In Kerala and Tamil Nadu, the per hectare subsidy of ₹ 39,171/- is offered to small growers having an area up to four hectare and ₹ 29675/- to marginal growers having area of above four to eight hectares. The subsidy component being 33 per cent and 25 per cent respectively of the cost of replanting and maintenance during gestation period. In Karnataka, the per ha. subsidy offered is ₹ 29,919/- for holdings up to four hectares and ₹ 22,666/- for holdings above four to eight hectares being 33 per cent and 25 per cent of the cost of replanting and maintenance during gestation period respectively (subsidy provided for planting material production will be deducted from subsidy for replantation). During 2009-10, an area of 2,863 hectares were brought under replanting at a total expenditure of ₹ 10.675 crores.

(iii) Rejuvenation

Under rejuvenation programme, poor yielding plants in the existing plantations will be identified and removed and the gaps thus formed will be filled with quality planting material. In addition to this, gap filling, scientific plant protection operations, fertilizer application, inter-culture operations, irrigation and other good agricultural practices as per the recommended package of practices will be adopted. This programme is implemented in the States of Kerala and Tamil Nadu only for registered small and marginal growers of cardamom having holdings up to four hectares. The subsidy provided for rejuvenation is ₹ 14,025/- per hectare (subsidy for planting material will be deducted). During 2009-10, a total of 2,160 hectares were covered under rejuvenation at an outlay of ₹ 2.654 crores.

Cardamom (large)

Large cardamom is mainly grown in the sub Himalayan tracts of Sikkim and Darjeeling district of West Bengal. The total area under Large cardamom during 2009-10 was 27,034 hectares with an estimated production of 4,180 tonnes. Lack of technical know-how, non availability of quality planting materials, presence of senile, old and uneconomic plants are the major factors affecting large cardamom. In order to improve production and productivity of cardamom large, the following programmes were implemented during 2009-10.

(i) Production of planting materials through certified nurseries

For making available quality planting materials to the growers, Board supports raising of sucker



nurseries in farmers' field by offering a subsidy of Rs.1.15 per sucker. During the season 121.30 lakhs cardamom suckers were produced from the certified nurseries opened during the previous season in growers field.

(ii) Replanting

The programme is intended to encourage the growers to take up replantation of old, senile and uneconomic gardens. A per hectare subsidy of ₹ 16,500/- and ₹ 12,500/- is offered to small and marginal growers having cardamom area up to four hectares and above four to eight hectares being 33 per cent and 25per cent of the cost of replanting and maintenance during gestation period respectively (subsidy offered for planting material production will be deducted from the subsidy for replantation). During 2009-10, an area of 942 hectares were brought under replanting at a total expenditure of ₹1.995 crores.

(iii) Rejuvenation

The programme is same as that for cardamom small and the subsidy offered is ₹ 6,600/- per hectare for holding size up to four hectares (subsidy for planting material will be deducted). During 2009-10, 617 hectares were covered involving an expenditure of ₹ 0.351 crores.

Export oriented production and post harvest improvement of spices

The activity components under the scheme are for improving quality of spices at farm level, encouraging organic production of spices, creation of replicable models based on integrated pest management , development of spices with export potential in North Eastern Region, extension service to spice growers etc.

Cardamom (small)

(i) Irrigation and land development

The programme aims at providing water resources in cardamom plantations by constructing water storage devices like farm ponds and wells. Installation of irrigation equipments, soil and water conservation works are also supported.

The Board is implementing the programme in the States of Kerala, Tamil Nadu and Karnataka. In Karnataka the programme is implemented jointly by the Spices Board and State Government of Karnataka under their Western Ghat Development Programme sharing the cost on a 60:40 basis by the State and the Spices Board. In Kerala and Tamil Nadu, full amount of subsidy will be paid by the Board due to non availability of funds from the respective State Governments. The programme provides financial support to farmers by way of subsidy ranging from 25 to 50 per cent of the unit cost approved by NABARD.

During 2009-10, in Kerala, a total number of 532 water storage devices/ irrigation equipments were installed covering 150.39 hectares under soil conservation. In Tamil Nadu, eight water harvesting device / irrigation equipments were installed under the programme. In Karnataka, 90 devices were



constructed and 110 irrigation equipments were installed during the season. The total expenditure towards payment of subsidy under the programme was Rs.1.036 crores, covering an area of 1,100 hectares.

(ii) Rain water harvesting devices

Irrigation during summer months is very much essential in cardamom plantations for getting a higher yield. A cheap method of harvesting rain water for irrigation purpose in the cardamom plantations is using excavated storage tanks lined with UV resistant polythene tarpaulin also called Silpauline. This method of harvesting rain water for irrigation purpose is being adopted by cardamom growers because of its low cost and convenience. The Spices Board is popularizing this method for irrigating cardamom plantations in the states of Kerala, Karnataka and Tamil Nadu.

It is estimated that a storage tank of 200 cubic meter capacity (eg. 16 x 5 x 2.5 meters lined with Silpauline) can store about two lakh liters of rain water, which is sufficient to provide 10 – 12 rounds of irrigation in a cardamom plantation of 0.8 hectare. The cost of such a device is estimated to be around ₹ 24,000/- (₹ 16,000/- for excavation work and ₹ 8,000/- for silpauline sheets). Subsidy @ 33.33 per cent of the actual cost, limited to ₹ 8,000/- is allowed for the construction of one 200 cubic meter capacity tank to registered small and marginal growers of cardamom. During 2009-10, 75 devices were constructed at total subsidy of ₹ 0.041 crores.

(iii) Improved cardamom curing devices

Cardamom is dried in traditional curing houses using firewood as fuel. Sun drying is not popular due to the loss of green colour during the process. As the productivity / production is registering an upward trend year after year, the firewood requirement is also increasing. As the wind fallen trees are not enough to meet the growing demand of firewood, the growers are forced to meet their requirement of firewood, either from the market or from resorting to cutting trees leading to degradation of forest cover. Moreover, wood is required for the construction of new curing houses especially for racks to spread cardamom and to provide false ceiling in the curing houses to preserve the heat.

Few innovative growers have started installing cardamom curing systems using alternate fuels, viz. Diesel, LP Gas which gives their produce better colour and cost effective drying. These driers are eco-friendly, labour saving and easy to operate. The harvested green cardamom can be put in to the drying chamber of these new curing systems after washing, instead of spreading it on the trays as is practiced in the conventional drying. The drying time is reduced from 28 – 36 hours to about 20 hours in these driers.

The objective of the programme is to popularise the cardamom drying systems using LPG/ Diesel/ Biomass and firewood as alternate fuel among the small growers of Kerala, Karnataka and Tamil Nadu by providing 33.3 per cent of the actual cost of drier as subsidy subject to a maximum of ₹ 60,000/- per device. Non-subsidy portion will be met by the growers from their own funds or through institutional finance.



Spices Board has prepared a list of approved suppliers and upper ceiling cost for driers of various capacities. The driers are to be purchased from approved suppliers. During 2009-10, Board had assisted installation of 90 numbers of improved cardamom curing devices involving an expenditure of ₹ 0.455 crores.

Cardamom (large) - Sikkim region

(i) Setting up of curing houses – Modified bhatti

The large cardamom growers traditionally cure their cardamom in the locally fabricated bhatties. This does not ensure proper drying and ideal colour in the cured cardamom. Board had introduced and evaluated a number of curing methods using different fuels and has selected a system which gives best quality. In order to popularize this method, Board is providing subsidy @ ₹ 5,000/- for 200 kg capacity and ₹ 9,000/- for 400 kg capacity drier respectively. During 2009-10, 42 modified Bhatties were set up at a total subsidy of Rs.0.0266 crores.

(ii) Rainwater Harvesting

The programme for rainwater harvesting using devices made of earth excavated pits lined with UV stabilized silpauline sheets which is being implemented in the States of Kerala, Karnataka and Tamil Nadu for cardamom small is being replicated in North Eastern States also for various spices. The terms and conditions and subsidy provided are same as that for cardamom small. During 2009-10, a total of 46 rainwater harvesting devices were constructed providing a subsidy of ₹ 0.01351 crores.

Development of spices in other North Eastern states

Chilli, ginger and turmeric are extensively cultivated in the North Eastern States. Some of the indigenous varieties viz., 'China', 'Nadia', and 'Thingpur' in Ginger, 'Lakadong' in Turmeric and birds eye in chilli are considered rich in oil, curcumin content and capsaicin content respectively. The agro-climatic conditions prevailing in NE States are suitable for the cultivation of pepper and large cardamom and these crops can be profitably grown in these regions to create exportable surplus. There is great scope in promoting production of organic spices in these states by popularizing organic farming practices among the growers so that sufficient quantity of organic spices can be made available for exports.

The major constraints noticed in the development of spices in NE region are lack of an organised marketing system and lack of know how on cultivation and post harvest practices. Spices Board therefore, implements an integrated scheme for the development of export oriented spices in N E States with the following components:

(i) Large cardamom – New planting

Large cardamom cultivation is presently concentrated in Sikkim and North West Bengal. The agro-climatic conditions prevailing in other NE States are suitable for cultivation of Large cardamom.



The scheme envisages to extent large cardamom cultivation in these areas by providing ₹ 17,500/- per hectare as subsidy towards cost of planting material and maintenance during gestation period. During 2009-10, a total of 336 hectares has been planted with Large cardamom seedlings raised in the certified nurseries opened during the previous season at a total subsidy of ₹ 0.594 crores.

(ii) Rainwater harvesting

The programme for rainwater harvesting using devices made of earth excavated pits lined with UV stabilized silpauline sheets which is being implemented in the States of Kerala, Karnataka and Tamil Nadu for cardamom small is being replicated in North Eastern States also for various spices. The terms and conditions and subsidy provided are same as that for cardamom small. During 2009-10, five rainwater harvesting devices were constructed providing a subsidy of ₹ 0.003 crores.

(iii) Curing Houses (Modified Bhatti)

In order to popularize setting up of low cost driers for curing large cardamom in North Eastern States, the programme for setting up of modified bhatties implemented in Sikkim has been introduced during XI Plan with the same terms and conditions and rate of subsidy that is available for the growers of cardamom large. During 2009-10, a total of 56 modified bhatties were set up at a total subsidy of ₹ 0.028 crores.

(iv) Production of organic pepper

The scheme is implemented in the states of Assam, Arunachal Pradesh, Manipur and Meghalaya by providing 33 per cent subsidy subject to a maximum of ₹15,000/- per hectares in two installments of ₹ 13,000/- and ₹ 2,000/- . Organic inputs will be multiplied with the assistance of Non Governmental agencies and supplied to the growers. The required planting materials will be produced through rapid multiplication units with the help of Governmental/ Non-Governmental agencies with full technical guidance from the Spices Board. During 2009-10, a total of 113 hectares has been brought under cultivation paying an amount of ₹ 0.292 crores towards subsidy.

(v) Organic cultivation of Lakadong turmeric

Lakadong turmeric is having high curcumin content (5.5 per cent) and hence suitable for extraction of colour. This variety is highly location specific and is very much preferred by the exporters for extraction of the colour. Hence organic production of Lakadong turmeric in Meghalaya and other North Eastern States was supported during XI Plan period. Availability of quality planting materials is a major limiting factor in its production. So, ₹ 12,500/- per hectare was provided as subsidy towards 50 per cent of the cost of planting material. This programme was implemented with the assistance of Government/ Non-Governmental agencies. During 2009-10, an area of 916 hectares has been covered paying a subsidy of ₹ 1.081 crores.

(vi) Organic cultivation of ginger

Ginger varieties like Nadia and China are having higher oil content and hence suitable for exports. During XI Plan period, to promote production of these varieties organically in NE states, ₹ 12,500/-



per hectare is being provided as subsidy towards 50 per cent cost of the planting materials. The programme is being implemented with the assistance of Governmental/ Non – Governmental agencies. During 2009-10, 827 hectare was brought under cultivation providing ₹ 1.062 crores as subsidy.

(vii) Training of officers and farmers of NE states

Board arranges training programmes for the officers of the State Agriculture/ Horticulture departments and growers of North Eastern States on the recent advances in the areas of cultivation, harvest and post harvest techniques of spices. The training is arranged in alternate years for officers and every year for farmers.

During 2009-10, a total of 85 farmers and five Officers of the North Eastern States were trained at Indian Institute of Spices Research, Calicut, KAU, Thrissur, ICRI, Myladumpara, Spices Board Quality Laboratory Cochin, and spice processing units. An amount of ₹ 0.118 crores has been incurred as expenditure under the programme.

Other Programmes for spices

(i) Seed spice threshers (Power operated and manually operated)

The harvesting and post harvest practices followed by some farmers of seed spices are unhygienic which results in contamination of the products with foreign matters like stalks, dirt, sand, stem bits etc. The seeds are separated by beating the harvested and dried plants with bamboo sticks or rubbing the plants manually by hand or trampling under the feet of the cattle. In order to educate the farmers and to avoid contamination in the final product Board proposes to introduce use of threshers which are operated manually as well as with power, for separating the seeds from the dried plants.

The cost of such a power and manual thresher are estimated as ₹ 1.00 lakh and ₹ 30,000/- respectively. The board is providing subsidy @ 50 per cent of the cost subject to a maximum of ₹ 50,000/- for a power thresher and ₹ 15,000/- for a manually operated thresher. During 2009-10, a total of 16 power operated threshers were supplied at a total subsidy of ₹ 0.080 crores.

(ii) Supply of pepper threshers

The objective of the programme is to assist the pepper growers to acquire threshers to separate pepper berries from spikes under hygienic condition. Pepper growers having a minimum of 500 vines are eligible to avail the scheme. The subsidy offered was ₹ 7,000/- per thresher irrespective of the capacity of the equipment.

During 2009-10, 201 pepper threshers were distributed involving expenditure of ₹ 0.145 crores.

(iii) Distribution of bamboo mats for pepper

The programme is intended to encourage the small and marginal pepper growers to dry pepper on hygienic bamboo mats coated with paper-fenugreek paste. During 2009-10, the Board had supplied 5000 bamboo mats of size 12' x 6' at 90 per cent subsidy to tribal growers and 50 per cent subsidy to other category of growers. Financial achievement is ₹ 0.10 crores during 2009-10.



(iv) Promotion of Integrated Pest Management in chilli (IPM)

Consignments of Indian chillies were detained in the recent past due to reported presence of pesticides. The presence of pesticides have caused serious trade disruptions. Therefore, it is necessary to popularise integrated pest management in chillies.

During IX Plan period, the Board under an UNDP Project, implemented a pilot project to promote Integrated Pest Management (IPM) in chillies through farmers field school, demonstration plots and supply of IPM kits to the growers of chillies in two villages in Andhra Pradesh with the help of NGOs. The project was successful in demonstrating benefits of IPM to the growers.

During X Plan period, Board had replicated the same in other villages in Guntur, Warrangal, Karim Nagar, Prakasam and Kurnool districts of Andhra Pradesh by supplying IPM kits containing pheromone traps, bio agents like trichoderma, trichogramma, neem pesticides and seed worms of vermi compost units at an estimated cost of ₹ 1,500/- per hectare. This comprises 50 per cent of the cost of the IPM package. The scheme is implemented with the assistance of Non Governmental Organisations. Support was given to the NGOs in maintaining extension staff to run the farmers field school and field visits to provide technical guidance.

During XI Plan, Board is continuing implementation of the programme using Outsourced Technical Assistants under the supervision of Board's Officers. In 2009-10, the programme was implemented in Warangal, Guntur, Prakasam, Karim Nagar and Kurnool Districts of Andhra Pradesh covering an area of 5,000 hectares, expending an amount of 0.947 crores.

Post harvest improvement of spices

(i) Supply of silpauline sheets for drying spices

In order to dry spices viz. pepper, chilli, seed spices and turmeric under hygienic conditions, the Board subsidises the supply of silpauline sheets to the small and marginal growers. During 2009-10, 5,385 silpauline (size: 12 x 9 meters – 120 GSM) sheets were distributed to small and marginal growers of pepper, chilli, ginger and turmeric at a total financial outlay of ₹ 0.63 crores.

(ii) Training programme for quality improvement of spices

The Board is regularly conducting quality improvement training programmes to farmers, officials of State Agri./Horti. Department, traders, members of NGOs for educating them on scientific methods of pre/post harvest and storage operations and updated quality requirements for major spices.

During 2009-10, training programmes were conducted benefiting 30,225 spices growers in 465 centres and 1,820 officials of State Agricultural/Horticultural Departments in 28 centres, 148 traders in five centres and 716 representatives of NGOs in 15 centres. Twenty one regional seminars benefiting 2,091 participants were also conducted. The total number of personnel trained under the above programme was 35,000 in 534 centres. The budget is met under HRD.



Promotion of organic farming

Internationally, the niche market for organically produced spices is growing at a fast rate. Early entry into this segment will improve the exportability and demand for Indian spices. In addition, availability of organically grown spices will help the country to withstand competition from low cost countries in South East Asia. The major bottlenecks in promoting organic farming are non-availability of organic farm inputs and high cost of organic certification of farms and processing units.

In order to promote farmers for organic production of spices, programmes like organic farm certification assistance, support for setting up vermi-compost units, promoting organic cultivation of spices are being implemented during XI Plan.

(i) Organic farm certification

The programme aims to help growers/ processors of spices in acquiring organic certification, which is a pre-requisite for marketing organic spices.

During XI Plan, Board is assisting group of farmers, NGOs and Farmers Co-operative Societies/ Associations in acquiring certification for their farms/ processing units by meeting 50 per cent cost of the certification, subject to a maximum of ₹ 75,000/-. Individual farmers and processors are eligible for 50 per cent of the cost of certification subject to a maximum of ₹ 25,000/- per certification. During 2009-10, assistance to the tune of ₹ 0.101 crores has been provided to 14 NGOs / groups and 13 individual farmers covering an area of 2,287.81 hectares benefiting 2,132 farmers. Five processing units were also supported under this programme.

(ii) Support for vermi-compost units

There is need to produce organic inputs in the farm itself to maintain soil fertility and to support organic production. In order to enable the growers to produce organic farm inputs, particularly vermicompost, ₹ 2,000/- is offered as grant-in-aid to growers to set up a unit with one ton output of vermicompost. During 2009-10, a total of 1,030 vermi-compost units were set up incurring an amount of ₹ 0.206 crores.

(iii) Organic cultivation of spices

Since the market for organic products is gradually registering an upward trend, there is large scope for promoting organic cultivation of spices in suitable locations. During XI Plan, Board is assisting growers for taking up organic cultivation of spices by giving a subsidy of 12.5 per cent cost of production subject to a maximum of ₹ 5,000/- per hectare. The programme implemented with the participation of selected NGOs by paying them retention fee @ ₹ 500/- per hectare. ₹ 250/- per hectare is proposed to be given for meeting cost of organic certification. These expenses will be deducted from the total amount of subsidy and balance only will be paid to the beneficiaries.

During 2009-10, an area of 600 hectares have been brought under organic cultivation of spices like Naga Chilli in Arunachal Pradesh, Byadagi chilli in Dharwad, Karnataka and Seed spices in Gujarat releasing subsidy to the tune of ₹ 0.31 crores.



Extension advisory service

Transfer of technical know-how to growers on production of spices is an important factor in increasing productivity. This programme envisages technical/extension support to growers on the scientific aspects of cultivation through personal contact, field visits, group meetings and through distribution of literature in vernacular languages for increasing productivity and improving quality of cardamom in the states of Kerala, Karnataka and Tamil Nadu, development of large cardamom in the states of Sikkim and West Bengal and selected spices in the North East and small pockets across the country.

Besides extension advisory service the production and post harvest related schemes of the Board viz., Special Purpose Fund for Replantation and Rejuvenation of Cardamom Plantations and scheme for Export Oriented Production and Post Harvest Improvement of Spices are implemented through the extension net work.

The pay and allowances of the staff in the Development Department, their TA/DA, expenditure on vehicle, office establishment and other contingencies are met under this programme.

During 2009-10, a total of 24,756 visits were conducted and 1,964 meetings were organized for cardamom small in the States of Kerala, Tamil Nadu and Karnataka, 9,181 visits and 312 meetings were conducted for large cardamom in Sikkim and Darjeeling District of West Bengal and 5,133 visits and 285 meetings were conducted in North Eastern States. The expenditure made under the programme during 2009-10 was ₹ 9.928 crores.



5. EXPORT DEVELOPMENT AND PROMOTION

The prime objective of the Board is to promote exports of spices and spice products from India. The export development and promotional programmes are formulated and implemented by the Marketing department of the Board. The programmes are aimed at equipping the exporters to have necessary competitive edge in sustaining and increasing export markets for Indian spices. The market development activities of the Board have their focus on quality, value addition and technology transfer/upgradation. The quality upgradation programmes of the Board have helped spices exporters to acquire capabilities so as to conform to the international quality standards. Marketing activities also include regulating the domestic marketing of cardamom through auction system.

Licensing and Registration forms a part of the regulatory functions of the Board. The exports of spices are regulated through the Spices Board (Registration of Exporters) Regulations 1989 while the domestic marketing of cardamom is regulated through Cardamom (Licensing & Marketing) Rules 1987. As per these rules, any person desirous of doing business in cardamom as auctioneer or dealer has to obtain a license. The exporters of spices have to obtain certificates of registration from the Board. These certificate/licences are issued for a block period of three years commencing from September onwards.

The quality specifications stipulated by the buying countries are disseminated to the exporters on a regular basis. Exporters are also given updated information on the opportunities emerging in different markets, new uses and applications in food and non-food sectors by conducting market studies.

Adoption of hi-tech & technology up-gradation

In order to encourage higher-end value addition in spices processing, through advanced technology, for better value realization and ensuring food safety and up-gradation of quality standards of the product to match international quality requirements, the programme offers grant-in-aid to the exporters for adopting hi-tech in spices processing and upgrade their existing technologies/facilities. The level of assistance is 33 per cent of the value of machinery/equipments for processing and packing, electrical installations and consultancy charges with a maximum of ₹ 1.00 crore per beneficiary for general areas and 50 per cent of the cost or ₹ 2.00 crores, whichever is less for special areas including North Eastern region. The scheme for Technology up-gradation also offers same level of financial assistance to support exporters to upgrade their existing processing/packing facilities to manufacture products of high-end value addition and quality standards to match the requirements of foreign buyers.

During the financial year 2009-10, total financial assistance of ₹ 396.90 lakhs was provided to 15 exporters for adoption of hi-tech in spice processing and for upgradation of processing units.

Setting up/upgradation of Quality Control Laboratory

The programme envisages, assistance to exporters who propose to set up/upgrade in-house quality control laboratories to establish facilities to undertake analysis of various parameters on quality of the products including detection of pesticide residues, aflatoxin, physical, chemical and microbial contaminants. Assistance is limited to 33 per cent of the cost of laboratory equipments/instruments,



glassware, laboratory furniture and other accessories including electrical installations and consultancy charges for setting up/upgradation of quality control laboratories. During 2009-10, seven exporters have availed this facility, the total grant-in-aid released is Rs.31.30 lakhs.

Quality certification, validations of check samples and training of laboratory personnel

Spices Board assists spices exporters in acquiring quality systems like ISO, HACCP and such quality certifications in their units. Board will also give assistance towards the cost of analytical charges for validation/standardization in laboratories abroad and charges/expenses for upgrading technical knowledge of laboratory personnel of the exporters in reputed international laboratories preferably approved by USFDA, EU, etc. Assistance is limited to 33 per cent of the cost. A total assistance of Rs.1.18 lakhs has been disbursed to three exporters under quality certification during 2009-10.

Sending business samples abroad

For finalizing the transactions on the basis of samples and to have more clarity in dealings and also to eliminate the possibility for trade disputes on quality aspects, dispatch of samples play an important role, and the Board is providing assistance for sending business samples of spices and spice products abroad. Under the programme, the Board will reimburse to a maximum of ₹ 50,000/- per year to registered manufacturer exporters of spices having Spices House Certificate/Spices Board Logo or Certified grower exporters of organic spices and registered brand exporters. During 2009-10, the Board extended financial assistance totaling of ₹ 7.72 lakhs to 25 exporters of spices.

Printing promotional literatures/brochures

Printing promotional literatures/brochures, making video films/CDs other electronic modes to project competencies and capabilities of exporters and the range of products and services offered to the prospective buyers abroad is supported by the Board. Qualified exporters of spices/spice products who have SHC/ Logo/Brand registered with the Board/Organic certification are eligible to avail the assistance. Financial assistance is provided @ 50 per cent of the cost subject to a maximum of ₹ 2.00 lakhs per brochure. Details of the schemes have been provided to the exporters to enable them to avail this assistance for export promotion. During 2009-10, the Board extended financial assistance of ₹ 3.97 lakhs to two exporters of spices.

Packaging Development and Bar Coding Registration

Under this programme financial assistance is provided for improving the existing packaging and develop modern packaging for increased shelf life, reduce storage space, establishing traceability and better presentation of Indian spices in markets abroad. All registered exporters are eligible to avail the assistance. Assistance is to the tune of fifty percent of the cost of packaging development and bar coding registration subject to a ceiling of ₹ 1.00 lakh per exporter per year.

Market Development Assistance (MDA)

Exporting companies with an FOB value of exports effected up to ₹ 15.00 crores in the preceding year, are eligible for assistance under the MDA guidelines of the Ministry of Commerce & Industry for participation in trade delegations/BSMs/fairs/exhibitions abroad to explore new markets for export of



their specific product(s) and commodities from India in the initial phase. The assistance is for airfare in economy/excursion class and or charges of the built up finished stall subject to an upper ceiling per participation to eligible spices exporters. The Board extended financial assistance of ₹ 8.64 lakhs to 13 exporters under the scheme during 2009-10.

Brand Promotion Loan Scheme

Under this programme financial assistance is provided to position specified brands in the identified outlets and selected cities abroad and to undertake necessary promotional measures for brand building like media promotion, promotional trips abroad and participation in international fairs.

During the year 2009-10 an amount of ₹ 80.00 lakhs has been disbursed to one exporter under the scheme.

Grant in aid for participation of exporters in international trade fairs/exhibitions

The programme envisages financial assistance to individual exporters who have obtained Indian Spice Logo/Spice House Certificate/Certified grower and exporter of organic spices and those exporters whose Brand names have been registered with the Board.

The assistance is in the form of reimbursement of airfare (economy/ excursion class) for visits to trade fairs subject to a maximum of ₹ 60,000/- for Logo/SHC/holders and ₹ 40,000/- for holders of registered brand and organic certificate per exporter per year. In case of hiring independent stall, the extent of assistance is 50 per cent of the cost of the stall per exporter subject to ceiling of ₹ 1.00 lakh. During the year under report, an amount of ₹ 3.61 lakhs has been disbursed to eleven exporters under the scheme.

Participation of exporters in International meetings/seminars and delegations.

Qualified representatives from exporter's associations/forums are assisted to participate in the international meetings/seminars/delegations by extending financial assistance up to 50 per cent of their airfare (economy/excursion class) subject to ceiling of ₹1.50 lakhs per exporter per year.

Market development programmes in the North Eastern Region

The Board initiated development programmes in selected states in the North East region in association with the concerned State Governments and M/s. ITC Ltd., Guntur. Accordingly, a tripartite agreement has been signed with the State Government of Nagaland, ITC Ltd., and the Board on 20.10.2007 for development of Naga Chilli and other spices grown in the state. The MoU agreement in respect of Maghalaya and Sikkim is under consideration.

Indian Spice Logo

Indian spice logo which denotes the quality of spices is awarded to manufacturer exporters of spices and the Logo is registered in important countries abroad. As per the new amendments approved by the Government, the Logo is now extended to packs of any unit weight to enable the manufacturers to get the Logo in their packs. The logo holder can affix this symbol of quality on their consumer packs as a mark of 'Indianness and Quality'.



Spice House Certificate

The Spice House Certificate is awarded to those exporters of spices who have installed required facilities for cleaning, processing, grading, packaging and warehousing and quality assurance. Only those exporters who have acquired ISO & HACCP/GMP certificate are eligible for Spice House Certificate. Board continued to renew the Spice House Certificate and issue of new certificate to the eligible exporters. At present 36 units have been awarded with Spice House Certificates.

Registration of brand name

The objective of the programme viz., registration of brand name is to support export of spices/spice products in consumer packs under Indian brand names and gain market share in the fast growing market of branded consumer packs. The Board has specified packing standards for different spices for different unit weights in consultation with Indian Institute of Packaging. At present 48 exporters have registered their Brands with the Board.

Product development & research

Under this programme financial assistance is provided to exporters/research institutions to undertake product research and development based on spices. This would include development of new products, clinical trials and patenting of the new products for export. During the year under report ₹ 4.75 lakhs has been extended to two exporters.

Electronic auction system in cardamom

The Board has introduced electronic auction (E-auction) system for cardamom (small) in 2007-08 replacing the manual system in the major producing states of Kerala and Tamil Nadu, which produces 80 per cent of cardamom (small) in the country. E-auction has provided increased transparency in transactions and ensured competitive price to the growers. The system has functioned successfully to the satisfaction of all stakeholders.

Spices Parks in major spice growing/marketing centres

Spices Board has introduced the concept of Spices Parks in the major spice growing/marketing centers. The Spice Parks will provide common facilities for drying, cleaning, grading, processing (grinding, crushing etc.) sterilization, sorting, packing and ware housing of the spices. The park will also provide Minimal Processing Facilities closer to the growing areas with drying and packing facilities. Another advantage anticipated from the parks is the complete documentation to Traceability of the spices from the farmer to the processors/exporters. The elimination of two to three channels in the distribution chain will ensure better prices to farmers and thus empower them. Board has taken initiative to establish Spices Parks at seven locations. The centres where Spices Parks are proposed and their respective status are as under:

Chhindwara, Madhya Pradesh: The Board has purchased 9.34 acres of land at Chhindwara for the establishment of plant for dehydration of garlic and extraction of chilli. The work of park commenced on 15.6.2007 through the consultants M/s. KITCO Ltd., Cochin. The Garlic Dehydration unit was inaugurated in the month of February 2009. The construction and installation of building and machines



for dehydration of vegetables like onion, spinach, carrot etc. were done and commissioned. The work of a green chilly extraction plant is in progress.

Idukki District, Kerala: Memorandum of Understanding between the Board and KINFRA representing Government of Kerala has been executed on 13-2-2007 for establishment of Spices Park. Since the Govt. of Kerala is delaying the land allotment for setting up the Spices Park, the Spices Board took over an area of 12.5 acres on lease at Puttady, Idukki district for 30 years from the CDF Trust to set up a Cardamom Complex (Spices Park) providing necessary common infrastructure. M/s KITCO Ltd. had been entrusted the consultancy of the project at a total cost of a total of 12.47 crores. The complex has infrastructure facilities like pre cleaner, de stoner, steam washing, steam sterilization, grinding, crushing and packing facilities for cardamom and pepper. Also the facilities like godown, weigh bridge etc. are provided. A common cardamom e-auction center is also set up.

Guntur, Andhra Pradesh: The Government of Andhra Pradesh have allotted 124.78 acres of land in Benkayalpadu and Maidavolu village in Guntur district to the Board for setting up the Spices Park at a cost of ₹ 62.39 Lakhs. The foundation stone was laid by Late Dr. Y.S. Rajasekhara Reddy, Hon'ble Chief Minister of Andhra Pradesh on 21.08.2008. The Board had invited expression of interests from entrepreneurs and consultants for setting up the park and processing units in the park. M/s. Feat Technical Services Cochin has been engaged to offer professional consultancy services including master plan design and detailed engineering, management and construction supervision at a cost of ₹ 38.97 Lakhs. The initial civil work for construction of internal roads, drains, compound wall and fencing for the site for spices park has been awarded to M/s. Raghava constructions Hyderabad on 26th October, 2009 at a cost of ₹ 8.56 crores and the period of completion of the work is 18 months. The allotment of land to the exporters for setting up manufacturing/processing unit based on the EOU received in the Board will be finalized shortly.

Sivagangai, Tamil Nadu: The Board has acquired an area of 72.73 acres of land for setting up Spices Park at Sivagangai from the Government of Tamil Nadu at a cost of ₹ 48,85,440/-. Shri. P. Chidambaram, Hon'ble Finance Minister has laid the foundation stone on 23.8.2008. Meetings of stake holders of spices industries viz. farmers, traders, exporters, government agencies, financial institutions were arranged in March 2009 at Shivagangai and Virudhnagar. M/s. KITCO Ltd. Cochin has been appointed as consultants for setting up the Park and the master plan is prepared. M/s. KITCO invited tenders and the work is being awarded.

Jodhpur, Rajasthan :- Spices Board acquired 60 acres of land in Rampura Bhatia village, Jodhpur district in Rajasthan for setting up of Spices Park. M/s. KITCO has been appointed as consultants for the work. Based on the tender, the initial infrastructural work was awarded to M/s. South Indian constructions at an amount of ₹ 11,94,97,730/-. The work had already started.

Jhalwar, Rajasthan:- The Government of Rajasthan alienated 68.28 acres of land for the Board at Jhalarpatan village at free of cost. Meantime, considering the suitability of the area Government of Rajasthan allotted another land admeasuring about 100 acres in Rampura Bhatia in Osian taluk and the Board took over the land in June 2009. The preliminary work for production of high yielding planting materials, demonstration plots are in progress.



Mehsana, Gujarat:- The Government of Gujarat provided the Board 166 acres of land at Moje Tarbai in Taluka Visnagar. The Board had paid an amount of ₹ 4,78,22,405/-. And the Board is waiting for the confirmation about the formal allotment of the land.

Regional Quality Evaluation Laboratories

The Board has proposed to set up Regional Quality Evaluation Laboratory cum Training Centers at various centres to facilitate the exporting community to analyse export products and conform to the prescribed quality Standards to their overseas buyers which would increase consumer confidence in the buying countries on quality aspects. The laboratory at Guntur has started functioning. The other centres where the Quality Evaluation Laboratories in progress are Chennai, Delhi, Kolkata, Tuticorin, and Kandla. The Board has acquired 2.00 acres of land at Gummidipoondi from SIPCOT, Chennai and 936 square meters of land at Narela from Delhi Development Authority, Delhi at a cost of ₹ 40.00 lakhs and ₹ 70.73 lakhs respectively, for the Board's laboratories at Chennai and Delhi. The laboratories in Chennai, Delhi and Tuticorin will be functional by the end of 2010. The laboratories in Kolkata and Kandla are expected to be completed by the middle of 2011.

Licensing and registration

Licensing and registration are part of the regulatory functions of the Board. The export of spices is regulated through the Spices Board (Registration of Exporters) Regulation 1989 and the domestic marketing of cardamom is regulated through Cardamom (Licensing & Marketing) Rules 1987. The registration certificate as per the above regulations are issued for a block period of three years. The new block period 2008-2011 commenced from 1-9-2008. As on 31.3.2010, the Board has issued following numbers of certificates/licences.

1	Certificate of Registration as Exporter of Spices	2568
2	Dealer Licence - Small Cardamom & Large Cardamom	743
3	Auctioneer Licence	12

Sampling and testing of 'Sudan dye' & aflatoxin

The mandatory sampling and testing of export consignments of chilli/chilli products/food products containing chilli for detection of sudan dye (I-IV) and aflatoxin continued during the year under report. The compulsory testing of turmeric powder for sudan dye (I-IV) for selected destinations were also continued. The analysis of samples are completed within 24 hours on receipt of the samples at the Quality Evaluation Laboratory of the Board at Cochin and Mumbai, and the results are faxed forthwith. Stuffing supervision of the cleared lots is also carried out as per the shipment schedule of the exporters. During 2009-10, a total of 19,900 samples were analysed.



International Meetings and Seminars

IPC Meetings

The 37th Annual Session of the International Pepper Community was held at Belem, Para, Brazil during 30th November, 2009 to 4th December, 2009. Chairman, Spices Board who is the Plenipotentiary representative of Government of India represented in the Session. Director (Mktg.) lead the Indian Pepper Exporters Delegation to Brazil. During the Session, Chairman, Spices Board has been nominated as Chairman of the International Pepper Community for a period of one year. It has also been decided to hold the 38th Annual Session of the IPC meeting at Cochin during November, 2010.

ASTA 2009 Annual Meeting

ASTA 2009 Annual Meeting and Trade Show was held in Arizona, USA during April 26-29, 2009. The Annual Meet discussed vital business information and networking opportunities, a wide range of industry related issues, including food safety, standards, the health benefits of spices, flavor trends and the impact of globalization. Chairman, Spices Board represented the ASTA meeting at Arizona, USA.

World Spice Congress

The 10th World Spice Congress was organized in a systematic manner at Hotel Hyatt Regency in New Delhi during Feb 3 to 5, 2010. The theme of the Congress was “Global Concerns...India’s response”. Mr. Jyotiraditya M. Scindia, Hon’ble Union Minister of State for Commerce, inaugurated the Congress. Mr T. Nandakumar, Secretary, Union Ministry of Agriculture, Government of India delivered the keynote address and inaugurated the exhibition.

The Congress witnessed a gathering of 163 international delegates from 38 countries and 291 Indian delegates. This was the record turnover of delegates. The highlight of the Congress was the business sessions on Global Agricultural Concerns and India [Session 1], Crop report [Session 2] and Food safety and Spices – an open session among stake holders [Session 3]. Officials from European Food Standards Authority, USFDA, Food Control Authority from South Africa, ASTA, IOSTA, European Food Safety, European Spice Trade, Mc.Cromic USA and Trade Representatives from India presented papers on the above topics. A special invitee from Guatemalan Trade was also attended the event.

International Organization of Spice Trade Associations (IOSTA)

The International Organization of Spice Trade Associations is made up of spice trade associations from around the world whose members meet regularly to discuss issues relevant to the spice industry.

The IOSTA met two times during 2009-10, (1) ASTA convention held at Arizona, USA in April 2009 and (2) the World Spice Congress held at Delhi in February, 2010 to address common issues and seek sensible solutions to ensure the sustainability of the spice industry and bring together the spice associations from around the world. A Good Agricultural Practice guide has been developed by IOSTA which has to be used as a resource in the growing and harvesting of spices.



It has also been decided to function its Head Quarters at Kochi, which is attached to the Head Quarters of Spices Board.

Other Export Promotion Activities

During 2009-10, a total of 157 foreign trade enquiries and 307 domestic trade enquires for spices and spice products had been received and these enquiries were replied with the contact details of the exporters. These enquiries were also compiled and published in Foreign Trade Enquiries Bulletin (fortnightly).

The important notifications on spices have also been compiled and disseminated to the trade through the publication “Spices Market” (weekly).

Country specific export analyses of spices have also been prepared for Russia, Canada, Kazakhstan, USA, EU, Ukraine, Turkmenistan, Mexico, Japan, Chile, China, LAC, Tanzania and African counties for joint working group meetings/delegations, etc.

Suggestions from spice trade on pre-budget proposals for the year 2010-11 have been collected, compiled and provided to Ministry and other Government institutions.

The machinery manufacturer’s profiles were compiled and updated the information in Board’s website.

The Board has continued its efforts to settle disputes/complaints between the exporters and importers of spices. The complaints received were examined and taken up with concerned parties, importers and Embassies for amicable settlement.

Membership with FIEO, CII, FICCI, ASTA, ASSOCHAM, KMA, AIMA, ITPO, Indo-American Chamber of Commerce, Indo-China Chamber of Commerce, Indo-German Chamber of Commerce, Indian Council of Arbitration, Indian Habitat Center, Kerala Productivity Council etc. continued.

Geographical Indications Registration of Spices

The objective of the Geographical Indications of Goods (Registration And Protection) Act, 1999 is to provide for the registration and better protection of geographical indications relating to goods in India. It is an indication of goods originating from a definite geographical territory. It is used to identify agricultural, natural or manufactured goods; produced or processed or prepared in that territory and have a special quality or reputation. The primary purpose of this registration is to provide legal protection to Indian Geographical Indications, which in turn boost exports. Registration of Geographical indication promotes economic prosperity of producers of goods produced in a geographical territory.

Board has obtained GI registration for Malabar Pepper, Alleppey Green Cardamom and Coorg Green Cardamom. GI registration of Byadagi chilli and Guntur Sannam Chilli are in the final stage. Board has initiated steps to register Erode Turmeric also.



6. QUALITY IMPROVEMENT

The Quality Evaluation Laboratory of the Board was established in 1989. It is certified under ISO 9001:2000 quality management system in 1997 and ISO 14001:2004 environmental management system in 1999 by the British Standards Institution, the U.K. and accredited under ISO/IEC: 17025 in September 2004 by the National Accreditation Board for Testing & Calibration Laboratories (NABL), Department of Science & Technology, Government of India.

The Laboratory provides analytical services to the Indian Spice Industry and monitors the quality of Spices produced and processed in the country. It also undertakes analysis of consignment samples under the mandatory inspection of Spices Board. It has facilities to analyze various physical, chemical and microbial parameters including pesticide residues, aflatoxin, heavy metals and contaminants/adulterant artificial dyes in spices and spice products. The Laboratory follows internationally accepted test methods for various analysis. The laboratory is equipped with the latest sophisticated instruments to undertake the analysis as per the requirements of importing countries. All the activities under the ISO 9001:2000 systems established in the laboratory are fully computerized.

To validate the analytical methods adopted, the laboratory regularly participates in check samples/validation programmes organized by National/International agencies like Food Analysis Proficiency Assessment Scheme (FAPAS) and Food Examination Proficiency Assessment Scheme (FEPAS) by Central Science Laboratory (CSL), the U.K, American Spice Trade Association (ASTA), USA, International Pepper Community (IPC), Jakarta and proficiency testing programme conducted by the NABL accredited Laboratories in India, etc. The Laboratory also conducts inter laboratory check sample programmes for the major parameters (like Aflatoxin, Sudan dye I-IV and pesticide residues) with the laboratories in major importing countries. It also conduct & inter laboratory check sample programme in all the Spices Board accredited laboratories for various parameters. All the technical staff in the laboratory are periodically trained in reputed international laboratories like Central Science Laboratory, the UK, Japan Food Research Laboratory, Japan, Certified Analytical Laboratories Inc; USA etc. to update their analytical skill on par with the international standards.

Analytical services

The laboratory continued the analysis of chilli and chilli products for the presence of Sudan dye I-IV and Aflatoxin under the mandatory sampling of consignments of chilli, chilli products, turmeric powder and other food products containing chilli. The laboratory is also providing analytical services for the analysis of other illegal dyes like Para Red, Rhodamine B and Butter Yellow, Sudan Red 7B, Sudan Orange G, Sunset Yellow etc.

During the period, the laboratory analysed 56,617 samples for various parameters including pesticide residues, aflatoxin, illegal dyes, (such as Sudan dye-I-IV, Rhodamine, Para Red etc) in chilli and chilli products and an amount of ₹ 6,27,91,335/- was generated as analytical revenue. When compared to last year there is an increase of 13,452 numbers of samples and ₹ 1,47,98,393/- in terms of analytical revenue.



As a part of providing speedy analytical services to exporters, Spices Board is establishing Regional Quality Evaluation Laboratories at major producing/exporting centres like Mumbai, Guntur, Chennai, New Delhi, Kolkata, Tuticorin and Kandla. The laboratory at Mumbai was inaugurated during June 2008 and the laboratory at Guntur will be inaugurated during April 2010.

Human resources development programme

As part of improving the technical capabilities of the laboratory personnel, the following training programmes/workshops were attended by the laboratory staff during the period.

- (1) One technical staff attended the seminar on MS Technology and Food Safety conducted by M/s. Agilent Technologies Pvt Ltd., Cochin on 28th April 2009.
- (2) Two technical staff attended the workshop on 'The use of Hyphenated techniques in Mass spectrometry' organized by ISAS, Cochin Chapter during April 2009.
- (3) One technical staff attended the four days training programme on Laboratory Management and Internal Audit as per ISO/IEC 17025-2005 at the Centre of Electronics Test Engineering, Bangalore during 12-15 May, 2009.
- (4) One technical staff attended the Lead Auditor Course on ISO 9001:2008 System conducted by M/s. Moody International Ltd., during 4-8 May 2009.
- (5) One technical staff attended the training programme on UV-VIS/FTIR conducted by M/s. Shimadzu during July 2009.
- (6) Senior Scientist (QC) attended the training programme on Lead Auditor Course on ISO 9001:2008 conducted by M/s. Moody ICL Certification Ltd., during 03-07 August 2009 at Abad Plaza, Cochin.
- (7) Senior Scientist (QC) attended the 30th Technical Sub Committee meeting of CFRD at the Head Office of M/s. Supply Co, Cochin on 13 August 2009.
- (8) Junior Scientist from Mumbai Laboratory attended the training programme on General requirements for the competence of calibration and testing laboratories and internal audit as per ISO/IEC 17025 conducted by M/s. MSME (IDEMI), Mumbai during 24-27 November 2009.
- (9) Two technical staff attended the three day external training programme on ISO/IEC 17025 quality systems and internal audit, Cochin from 20-22 February 2010.

Training programme on analysis of spices and spice products

Under "Earn while you learn" programme, 72 students were selected from various nearby colleges through campus interview and trained them on the analysis of spices and spice products for various parameters to function as contract analysts in the laboratories at Cochin, Mumbai and Guntur for a period of one month. The trained and experienced candidates after their service in the laboratory for



a period of one year are made available to the Spice Industry to work as technical staff in the laboratories attached to spice industry.

Training programme for the technical personnel from spice industry

During the year, the laboratory conducted four training programmes on the analysis of “Spices and Spice products” for physical, chemical, residual and microbiological parameters. Twenty four technical personnel from various Spice Industries/other Institutions had attended the programme and a revenue of ₹ 1,32,360 was generated from training fee.

Spices Board scheme for laboratory accreditation

The Laboratory implemented the scheme for Laboratory Accreditation, to recognize the laboratories in private sector that can render quality analytical service to exporters of Spices/Spice products. The surveillance audit of the laboratory M/s. Arbro Pharmaceuticals, Delhi was carried out during the current year. This scheme has been temporarily discontinued during 2009 as per the directions from the Ministry.

Participation in national/international events

The laboratory actively participates in National/International meetings related to the Quality issues, formulation of specification for spices/spices products etc. During the current year, the Officers from the laboratory attended the following events.

- (1) Workshop on Pesticide Residue Analysis using GC and GCMS at Customer Support Centre, Shimadzu Analytical Lab., Andheri, Mumbai during May 2009.
- (2) 4th Technical Advisory Committee meeting of the Quality Testing Laboratory of the Coconut Development Board at Vazhakulam, Aluva on 16th June 2009.
- (3) Meeting of the International Pepper Community committee on Quality held at Jakarta, Indonesia during 20-21 June 2009.
- (4) IPC training programme on Microbiology held at Jakarta, Indonesia during 15-19 June 2009.
- (5) Training programme on Standardization of ISO specifications organized by BIS at NITS, Noida, New Delhi during 26-27 October 2009.
- (6) Workshop on HPLC Chromatography conducted by M/s.Waters at Cochin during January 2010.
- (7) World Spice Congress 2010 at New Delhi during 3-5 February 2010.
- (8) Meeting of Spice and Condiments Section Committee held at Cochin on 25th February 2010.

ISO 9001 to ISO 14001 related activities

Re-certification audit on ISO 9001:2008 were conducted by the BSI auditors on 2nd December 2009 and recommended the laboratory for re-certification under ISO 9001:2008 version without any major



non-conformances. ISO 14001 re-assessment audit was conducted on 11th December 2009. No major non-conformances were reported during the audit.

'Interested parties' meeting under ISO 14001 system was conducted on 23rd July 2009 to improve the system implemented in the laboratories.

NABL accreditation related activities (ISO/IEC: 17025)

Surveillance audit under ISO/17025 (NABL) was conducted during 20-21 May 2009 by NABL for the evaluation of the performance of implementation of the NABL system in the laboratory. The audit was completed without any major non-conformance.

ASTA check sample programme

The laboratory is participating regularly in the check sample programme conducted by American Spice Trade Association (ASTA). During the year, the laboratory participated in four sets of check sample programme for the parameters, colour value, capsaicin and water activity in ground capsaicin and piperine, moisture, volatile oil and water activity in ground black pepper. All the four sets of samples received for the analysis and all the results generated by the laboratory were found well within the limit of acceptable levels.

IPC check sample programme

The laboratory has also participated in IPC inter laboratory proficiency testing programme on physical, chemical and microbiological parameters during the year. Under the programme, the 12th round samples were prepared by Malaysia and sent to all the participating laboratories in the member countries including India. The samples sent by Malaysia are also distributed to all the Indian participant laboratories. The result generated by the laboratory was found to be well within the acceptable limits.

Spices Board check samples/proficiency testing programme

Under the proficiency testing programme, 14 sets of samples were prepared by the Laboratory and sent to all the Board's accredited laboratories for parameters of aflatoxin, total ash, acid insoluble ash, starch, vanilin and curcumin. The result generated by the participant laboratories are compiled, Z-score were prepared and distributed the same to all the participants in the programme.

Harmonization of Indian standards with ISO standards

Participated in the Harmonization of Indian standards with ISO standards and PFA which is being carried out in collaboration with the Bureau of Indian Standards (BIS), PFA and ISO Secretariat. Comments/suggestions were provided to BIS, PFA, ISO, IPC and CODEX on various documents related to the specifications/quality issues as and when called for by the National /International organizations/agencies.



Other activities

- The Quality Data Management Administration System (QUADMAS) established and utilized by the Laboratory has been revised to incorporate the various additional requirements of the Laboratory.
- The Laboratory provided assistance and guidance to five M.Sc students from different Universities to carry out their dissertation work in various quality aspects of spices/spice products analysis.
- The new Laboratories at Mumbai and Guntur are functioning successfully.
- The Quality Evaluation Laboratory functioned in the main building of the Spices Board head quarter has been shifted to the new building with state-of-art facilities and started functioning from 16th March 2010.
- Prepared a detailed plan and lay out for establishing Regional laboratories at Delhi, Chennai & Turicorin. Arranged the procurement of all the equipments, chemicals, glassware etc., for the Guntur Laboratory.



7. EXPORT ORIENTED RESEARCH

Increasing the productivity of cardamom (both small & large) and thereby enhancing the net income of spice farmers on one side and producing adequate surplus for meeting the export demand was the thrust given at the Indian Cardamom Research Institute during 2009-10. Research was focused on increasing production and productivity in marginal and low production regions of small cardamom growing tracts of Kerala, Karnataka and Tamil Nadu as well as large cardamom growing regions of North Sikkim. Farmer participatory research and technology evaluation were the major activities undertaken by the research department for the current year.

Major farmer participatory research programmes

(a) Evaluation of the hybrid clone ICRI-5

The large-scale demonstration and evaluation of ICRI-5, the first man made hybrid variety of cardamom, initiated in 2008 planting season in 200 plots across the cardamom tract of Idukki was monitored for growth performance. In most of the locations, growth of ICRI-5 was either better or on par with local check, mostly Njallani. In locations like Elappara and Kattappana, ICRI-5 produced over 100 tillers per clump in one year. The demonstration plots will be monitored for a few more crop seasons for comparing the yield performance.

(b) Demonstration of ICRI-7 in Wayanad

The performance of ICRI-7, the cardamom variety evolved for Wayanad zone was demonstrated in ten locations in Wayanad during 2008-09 crop season. ICRI-7 outperformed the local check with respect to growth parameters in all the locations. The variety has been released by the State Seed Sub Committee on Crop Standard. Notification and Release of varieties for Agricultural and Horticultural Crops, Government of Kerala was held in its 24th meeting held on 15th January, 2010 for cultivation in Wayanad.

(c) Demonstration of GAP

The Good Agricultural Practices (GAP) for cardamom evolved by the institute has been demonstrated in five farmers' fields for validation and adoption by farmers.

(d) Demonstration of EPN

Entomopathogenic nematode (EPN) was found to be a potential bio control agent for cardamom root grub. The effectiveness of EPN in reducing root grub was demonstrated in fifty farmers' plots. ICRI produces EPN and supplies to needy farmers at a nominal service charge. About 100 farmers were benefited with the bio control programme in 2009-10. It is the first of its kind in India that EPN is used by farmers for control of cardamom soil pest.

(e) Neem Kernel Aqueous Extract (NKAE)

Integrated pest management involving five sprays of NKAE five per cent and nine insecticide sprays



was found to be equally effective to 16-20 rounds of insecticide sprays practiced by farmers, in controlling thrips, mites, midges and fruit borer of chilli, thereby reducing the insecticide load by 30 per cent.

(f) National Agricultural Innovation Project

The National Agricultural Innovation Project (NAIP) “Livelihood improvement and empowerment of rural poor through sustainable farming system in North Eastern Region” is implemented in North Sikkim. The objective is to demonstrate all the scientific practices of cultivation of large cardamom so as to improve its productivity and earnings of the farmers through a cluster approach.

Ecosystem conservation & protection

(a) Germplasm

Germplasm cataloguing and DNA finger printing of germplasm accessions was initiated. Rejuvenation of 120 accessions of small cardamom was carried out and the accessions are screened for biotic and biotic stresses. Fifty accessions of small and large cardamom were screened using thirteen primers for creating DNA finger prints of selected genetically divergent cardamom accessions from ICRI germplasm.

(b) Pest surveillance

During summer months, minor pests viz., scale insect and red spider mites (both are sucking pests) emerged as major pests in several farmers' plots where pesticides with higher doses were sprayed indiscriminately. ICRI, during surveillance study, inspected such areas, explained the cause for such resurgence of pests and advocated suitable IPM practices.

(c) Weather monitoring & crop impact studies

The weather in the cardamom ecosystem in Idukki District was monitored through Automatic Weather Station. There has been substantial fluctuation in weather conditions during the year. The delay in onset of monsoon during the month of June by 20 days has severely affected the panicle elongation and flowering, which resulted in reduction of crop by 15-20 per cent as well as in delayed harvest. The maximum and minimum temperature during February and March were 2-4° c above normal, which may have a negative impact on the subsequent year's crop. Weekly weather forecast and advice were given to farmers in Idukki and other cardamom growing tracts through various electronic media.

(d) Monitoring of pesticide residue

The toxic pesticide residue contamination in cardamom and pepper ecosystem was constantly monitored. It was found that considerable proportion of cardamom has high residue levels of various pesticides, especially that of quinalphos and triazophos. Even endosulfan, a banned pesticide for use in Kerala was detected in cardamom.



(e) Soil health analysis

About 2500 soil samples were analyzed for various chemical parameters from farmers' field and it was found that there is drastic decline in soil pH i.e., increase in soil acidity, decline in organic carbon, depletion of Calcium & Magnesium and wide spread deficiency of Zinc and Boron.

These studies necessitate the constant monitoring of environment and soil health at farm gate level for sustainable production of quality spices for domestic use and export.

Sustainable production technology

(a) Varietal development

Attempts are made for evolving location specific high yielding varieties/hybrids with the objective of improving the production and productivity of specific zones of the cardamom tract. MCC-346 is targeted for Nelliampathy zone and SKP-170 for Karnataka.

(b) Integrated pest and disease management

Farmers are advised on the integrated pest and disease management techniques evolved at the institute with greater emphasis on non chemical measures. The use of micro organisms such as *Pseudomonas* and *Trichoderma* for the management of diseases and *Verticillium*, *Beauveria* and Entomopathogenic nematodes (EPN) for the management of pests was widely demonstrated in farmers' fields.

(c) Integrated nutrient management

Application of VAM in the nursery has shown positive results in root establishment, tiller production and overall quality of the planting material produced in the nursery. Application of bio fertilizer consortium alongwith recommended dose of fertilizers showed better response on growth and yield parameters in cardamom.

Farmer oriented programmes

(a) Bio agent production

The institute has popularized the use of bio-agents for management of pests and diseases in the cardamom ecosystem. Availability of quality bio-agents has always been an issue for the farmers. ICRI ensures the supply of quality bio-agents to the needy farmers at very reasonable price. A bio-agent production unit along with laboratory is being constructed at a financial outlay of ₹ 1.90 crore with partial support from National Horticulture Mission.

(b) Soil test based advisory services

Soil samples received from farmers' fields were analyzed and recommendation provided on manuring. By providing information on the correct nutrient recommendation, wastage of fertilizer to the tune of more than 30 per cent could be achieved under field level resulting in substantial savings to the farmers.



(c) Scientific crop production services

To provide better services to cardamom farmers, a Farmers' Advisory Cell headed by a Senior Scientist was established at the institute to act as a nodal point. Prompt services and follow up actions were undertaken from the Cell.

(d) Short term training programmes

Two to five days training programmes on various aspects of spices production namely nursery production, organic input production, bio-agent production, post harvest technology etc. were organized.

Foreign delegation

Dr. J. Thomas, Director (Research) represented the Spices Board in the Poznan International Food Fair at Poznan in Poland during 14-17, September 2009.

Publications

A total of 22 research papers and 19 popular scientific articles were published in national and international journals.

Faculty improvement

Dr. S. Sreekrishna Bhat, Junior Scientist (Botany) was awarded Ph.D. in Genetics & Plant Breeding by the Andhra University for his doctoral thesis on Vanilla breeding.

Human resources development

All the Scientists of ICRI underwent a Short Term Executive Training Programme on "Competitive Advantage for R & D Management" from 6 to 10 July, 2009 at Indian Institute of Plantation Management, Bangalore.

Mobile Spice Clinic

A team of scientists visit a predefined cluster of plantations, assess the field and crop situations and undertake informal interaction with farmers to understand their problems and suggest solutions then and there itself. Thirty six such spice-clinics were conducted at various locations in association with Field Offices during the period. The necessary infrastructure for the conduct of mobile spice clinic was provided by the National Horticulture Mission.

Research monitoring and evaluation

The Annual Research Council (ARC), which is the technical auditing of the research department, was conducted during 19-20, August 2009. The committee chaired by Dr. S.N. Potty, former Director of Research, Spices Board, with Dr. A.K. Sadanandan, former Project Coordinator (Spices), ICAR; Dr. M.N. Venugopal, Principal Scientist & Head, IISR Cardamom Research Centre, Appangala; Dr. B.V.



David, President, Sun Agro Bio-systems Ltd., Chennai; Dr. Z. Abraham, Principal Scientist & Head, NBPGR Regional Station, Thrissur and Dr. K. Nirmal Babu, Principal Scientist & Head, Biotechnology Division, IISR, Kozhikode critically reviewed the research programmes and laid down the physical targets for the current year.

Major research highlights

- A high yielding cardamom variety, ICRI-7 with a yield of 1400kg/hectare has been developed and released for large-scale cultivation in Wayanad.
- DNA finger printing of both small and large cardamom accessions was initiated as a part of the germplasm characterization and documentation.
- Siapton 10 L (a growth stimulant) at a concentration of 0.2 per cent was found to enhance cardamom yield by 20per cent.
- Tissue culture protocol for rapid multiplication of pepper has been standardized and the plantlets are under various stages of evaluation.
- Popularized the use of EPN for the management of root grubs in cardamom.
- Coir mat (50 per cent shade) lined poly houses were found to be the best for planting material production of various spices.
- Quinalphos and Triazophos residues were detected in cardamom from Idukki District and suitable recommendations for reducing the toxic contaminants were recommended through Spice Clinics.
- Application of 0.25per cent Zinc and 0.2 per cent Boron enhanced the yield and capsule size in cardamom.



8. PUBLICITY AND PROMOTION

Publicity and promotion programmes for promoting Indian spices and spices products were undertaken as a major activity during the year under review. The programmes were aimed at carrying across the world the message of India as a consistent source of varied spices of top class, with assured quality at all times. Creating awareness and building image of credibility as an organization taking care of the total improvement of the country's spice industry was yet another focus of the programmes. The activities engulfed the wide audience of the industry consisting of farmers, traders and exporters. Making use of platforms for publicity, dissemination of information, compilation of information and publication were the highlights of the initiatives of the Board.

Popularising and promoting spices and its multi-range of value added products, generating awareness and publicity for the different schemes and programmes, broadcasting the very basic information for the stake holders in the spice industry and building institutional image were suitably weaved in all the activities. The multifarious publicity and promotional programmes pervaded every aspect of research, training, farming, post harvest, value addition, exports, market promotion and publication both within and outside the country.

Participation in international fairs

The Board has successfully organized participation in 19 international trade fairs in different countries. The fairs were selected in consultation with the Spice trade based on importance from the point of view of market potential and exports. Importance was given on physical participation of the exporters in these fairs with opportunities and back up support for showcasing capacities and capabilities. The Board's pavilions and stands supported the exporters for showcasing capacities and capabilities. The exhibitions pavilions and stands portrayed the overall strength and authenticity of Indian Spices through display of samples of products and graphic and pictorial presentations. The fairs yielded very serious trade enquiries, which were systematically passed over to the trade for further follow-up.

The Board made its presence in the following International Fairs.

- (1) SIAL, China 2009 during 19-21 May 2009.
- (2) Iran Food & Hospitality, Tehran, Iran during 24-29 May 2009.
- (3) IFT Annual meeting & Food Expo, Anaheim, USA during 6-10 June 2009.
- (4) Sweet Eurassia, Istanbul, Turkey during 18-20 June 2009.
- (5) Africa's Big Seven, Johannesburg, South Africa during 19-21 July 2009.
- (6) Agro Industrial Exposition, Bogota, Columbia during 16-26 July, 2009.
- (7) SIAL Mercosur, Buenos Aires, Argentina during 26-28 August 2009.
- (8) Fine Food Australia, Sydney & Indian Spice Food Festival, Australia during 7-10 September 2009.
- (9) Polagra Food 2009, Poznan, Poland during 14-17 September 2009.



- (10) India Show 2009, St.Petersburg, Russia during 30 September to 3 October 2009.
- (11) Anuga 2009, Cologne, Germany during 10-14 October 2009.
- (12) World Food 2009, Kiev, Ukraine during 27-30 October 2009.
- (13) Saudi Food 2009, Riyadh, Saudi Arabia during 1-4 November 2009.
- (14) Sixth Exhibition of Food Products, Services & Technologies, Chile, during 3-6 November 2009.
- (15) Ingredients Russia 2009, Moscow, Russia during 24-27 November 2009.
- (16) BioFach 2010, Nurenberg, Germany during 17-20 February 2010.
- (17) Gulfood 2010, Dubai, UAE during 21-24 February 2010.
- (18) Foodex 2009, Tokyo, Japan during 3-6 March 2010.
- (19) Cairo International Food Fair, Cairo, Egypt during 11-22 March 2010.

Participation in domestic fairs

On the lines of the participation in various fairs held outside India, exporters, progressive farmers and farmer groups were encouraged to participate and exhibit their product capabilities in various domestic fairs where the Spices Board participates. Participation had helped in showcasing products and capabilities besides tapping both domestic and international enquiries from various destinations.

The Board made its presence in the following Indian Exhibitions:

- (1) Organic Kerala 2009, Cochin, Kerala during 17-20 April 2009.
- (2) Haritholsavam, Maradu, Cochin, Kerala during 28 August to 1 September 2009.
- (3) 12th Expo, Kolkata, West Bengal during 2-6 September 2009.
- (4) UPASI, Coonoor, Tamil Nadu during 14-15 September 2009.
- (5) Agri Intex 2009, Coimbatore, Tamil Nadu during 2-5 October 2009.
- (6) Food Ingredients India 2009, Mumbai during 23-24 October 2009.
- (7) KPA Bangalore, Karnataka during 13-14 November 2009.
- (8) IITF, New Delhi during 14-27 November 2009.
- (9) Biofach 2009, Mumbai during 18-20 November 2009.
- (10) India International Food & Agro Expo 2009, Cochin during 19-21 November 2009.
- (11) Annapoorna World of Food India 2009, Mumbai during 25-27 November 2009.
- (12) Pala Flower Show, Pala, Kerala during 10 December 2009 to 3 January 2010.



- (13) Industrial Exhibition, Kolkata, West Bengal during 23 December 2009 to 3 January 2010.
- (14) Krishi Mela 2010, Thodupuzha, Kerala during 18-26 January 2010.
- (15) World Spice Congress Exhibition, New Delhi during 3-5 February 2010.
- (16) Karshakashree Mela, Muvattupuzha, Kerala during 9-15 February 2010.

Multimedia campaign on Seed spices

As part of the initiatives of the Spices Board in creating awareness on scientific post harvest practices in seed spices, a Field Publicity Campaign was organized in Pali and Jodhpur districts of Rajasthan and in Guna district of Madhya Pradesh during December 5 to 7 and December 10 to 13, 2009 respectively. The campaign in Pali district of Rajasthan was run in the villages of Mani Hari, Gurlai and Giridara. The campaign in Guna district of Madhya Pradesh was held in the villages of Mrigawas, Gulwara, Goleyaheda, Barkhadi, Dedla and Kudara. Campaign vehicles making announcements on the initiatives to be taken for quality production of seed spices toured the villages. Meetings were held in villages where experts spoke to the farmers on the essence of the campaign. Literature and brochures were distributed in the villages. To enlist the interest of the villagers in the campaign competition for children were organized and prizes were distributed. The campaign also helped in reaching the publications of the Board in Hindi language in these villages.

International media relations

Overseas Television team: M/s Metaphore Productions, Paris, France as part of their programme to shoot a film on "India Gardens" visited the spice growing areas of Idukki districts. The Board guided them on their schedules besides highlighting the E-auction systems in Idukki

Opportunity for students

Students from the Universities of Agriculture from Kerala and Tamil Nadu were provided opportunity to interact with the officials of the Board in batches besides to undertake studies on spices. Briefing on various crops was given and exposure to the literature on spices provided.

Visit of farmers

Batches of spices farmers sponsored by the Tamil Nadu Horticulture Department visited the Spices Board to learn and understand the programmes and activities of the Board. The Board received the farmers during the period on various occasions and interactive sessions were organized for them.

Electronic & Print Media

Talks and discussions were organized on various topics relating to marketing and cultivation of spices through the networks of All India Radio and Doordarshan in different parts of the country.

Background materials and briefing were done during the period to various newspapers and publications for production of features and articles on spices in various languages.



Press relations

Press Releases on export performance, election of office bearers and decisions of the Board, launching of Hindi website etc., were issued press conference on the conduct of the World Spice Congress in New Delhi, export performances were organized. Periodical press releases on grant-in-aid for educational institutions in cardamom growing areas, stipend for the children of cardamom workers, monthly export performances, export and productivity awards, etc were scheduled.

Periodicals

The Board had released various publications including periodicals on schedule.

- Spice India – journals (monthly) in five different languages of English, Hindi, Malayalam, Kannada and Tamil were brought out in time. This journal as a quarterly in Telugu and Nepali languages were also released on schedule. The monthly issues dealt with the following themes.

April –Quality appeal to farmers

May – Saffron

June-Pepper development programmes in Idukki district

July- Record performance in spice exports

August – Sense to toil brings essence to soil

September – Green pepper

October – Exhibiting resources

November- 10th World Spice Congress

December- Nutmeg

January – Field Publicity programmes in Rajasthan and Madhya Pradesh

February – Feature on World Spice Congress and in

March – Know how far from farmers – on seed spices.

- Foreign Trade Enquiries Bulletin(fortnightly) 54 issues were released
- Spices Market (weekly) 108 issues were released

Microwave oven recipes

A new set of spice based recipes for microwave oven cooking was compiled for promoting use of Indian spices in countries where micro oven based cooking are in vogue. The compilation contains over 50 recipes and cookery tips.



Books/booklets & posters

New publications with the following titles were released:-

- Annual Report for 2008-09.
- Booklet on Market Development & Crop Development schemes.
- Cardamom Package of Practices.
- Package of Practices on Ginger and Turmeric.
- Literature on post-harvest practices in seed spices for use in publicity campaigns in Hindi.

Brochures/promotional materials

- Promotional brochures in international languages of Russian, Arabic, Japanese and German were produced for use in various international fairs.

Production of video films/CD's

An instructional video film was produced in Hindi for screening during the campaign on quality on seed spices. CDs in Hindi language was produced on the Do's and Don'ts in quality of seed spices for use in quality campaigns.

Advertisement release

The Board released various advertisements for the procurement of polythene sheets, issue of educational stipend for children of cardamom workers, tender notification for expression of interests for Spice Parks and for consultants for Spice Parks through various leading newspapers, production of promotional materials, walk-in-Interviews for recruitment of technical assistants in Field Offices, Sourcing materials and manpower for other sections and Vacancy notifications.

Advertisements on various schemes and programmes of the Board were also released on important occasions in various languages in various regional publications across the country during the year.

Samples for display abroad

Ladies fair in Slovenia: Spices and Spice Products were dispatched to Slovenia for exhibition at the stall set up by the Indian Embassy in Slovenia for a trade display during November 2009.

Thessaloniki International Trade Fair: Gift hampers of spices, samples of spices products and whole spices were provided to the Indian Embassy in Greece, Athens for display at the exhibition stall set up by the Mission at the Thessaloniki International Trade Fair in Thessaloniki in Greece during August 2009.



9. TRADE INFORMATION SERVICE

Trade Information Service Division is responsible for the collection, compilation, analysis and dissemination of statistics relating to Exports, Imports, Area, Production and Domestic and International prices of spices. The month wise export estimates have been prepared from the Daily List of Exports (DLE) released by the major Customs offices of Cochin, Mumbai, Chennai, Tuticorin as well as from the information received from the Regional Offices of the Board. The monthly import of spices into India has been estimated using the Daily List of Imports (DLI) collected from the major customs like Cochin, Mumbai and Chennai and other land ports. Domestic and international prices received from various agencies like India Pepper and Spice Trade Association, Agriculture Produce Marketing Committees, Merchants Associations, International Trade Centre, Geneva, etc have been compiled and disseminated through the Spices Market bulletin as well as through the Board's website.

Electronic Auction (E-auction) for Cardamom(Small) has been conducted in Bodinayakanur and Vandanmedu which ensured transparency and better price realization for the cardamom growers.

Since the Board is responsible for the production development of Cardamom (small) and Cardamom (large), area, production and productivity of these spices are estimated by Trade Information Service (TIS) Division based on the field sample study conducted through the field set up. Area and production of other spices are collected from the State Economics and Statistics/Agriculture/Horticulture Departments and compiled. Information on area, production, prices and export has been furnished to various users in the industry on request.

The division is responsible for constitution of the Task Forces for various spices, organize meeting of the task forces and its follow up action. During the year, the task force set up for pepper and seed spices met and held the discussions on the production and export prospects of these spices.

Area and production of spices

The area, production and productivity of Cardamom (Small) and Cardamom (Large) for 2009-10 compared to 2008-09 are given in table I & II. Area and production of other spices is given in table-III.



Table-I
State-wise area and production of cardamom (small)
(Area in Hect., Production in M.T., Productivity in Kg/ha)

State	2009-10				2008-09			
	Total Area	Yielding Area	Production	Productivity	Total Area	Yielding Area	Production	Productivity
Kerala	41,593	29,014	7,800	269	41,588	29,100	8,550	294
Karnataka	24,956	17,992	1,550	86	25,021	18,132	1,700	93
Tamil Nadu	4,561	3,231	725	224	4,561	3,223	750	233
Total	71,110	50,237	10,075	201	71,170	50,455	11,000	219

Source: Estimate by Spices Board

Table-II
State-wise area and production of cardamom (large)
(Area in Hect., Production in M.T., Productivity in Kg/ha)

State	2009-10				2008-09			
	Total Area	Yielding Area	Production	Productivity	Total Area	Yielding Area	Production	Productivity
Sikkim	23,729	17,411	3,540	203	23,729	17,371	3,675	212
West Bengal	3,305	2,715	640	236	3,305	2,715	625	230
Total	27,034	20,126	4,180	208	27,034	20,086	4,300	214

Source: Estimate by Spices Board

The area and production of other major spices are given in Table III

Table-III
Area and production of Major Spices (Area in Hect., Production in tonnes)

Spice	2008-09		2007-08	
	Area	Production	Area	Production
Pepper	23,6180	55,000	1,79,980	50,000
Chilli	8,10,800	13,00,940	8,35,570	13,72,530
Ginger	1,41,410	8,06,900	1,20,910	7,51,970
Turmeric	1,92,170	8,67,170	1,78,600	8,85,710
Garlic	2,08,610	11,05,650	2,20,170	10,94,410
Coriander	4,95,960	3,28,500	4,58,200	2,86,320
Cumin	5,71,973	3,05,158	4,77,936	2,64,860
Fennel	74,769	1,11,352	84,473	1,31,652
Fenugreek	89,335	62,004	87,065	67,645

Source: State Directorate of Economics & Statistics/Agri./Horti Departments



Auction sales and prices of cardamom (small)

The state-wise auction sales and weighted average price of cardamom (small) for 2009-10 and 2008-09 are given in table-IV.

Table-IV
Auction sales & prices of cardamom (small) in India
(Qty.in M.T., Price in ₹/kg.)

State	2009-10 (August-July)		2008-09 (August-July)	
	Quantity auctioned	Weighted average auction price	Quantity auctioned	Weighted average auction price
Kerala and Tamil Nadu (e-auction)	9,697	879.90	9,771	539.59
Karnataka	84	592.19	130	414.62
Bombay	24	864.65	56	574.94
Total	9,805	877.41	9,957	538.16

Prices of cardamom (large)

The average wholesale prices of cardamom (large) at Gangtok and Siliguri market for 2009-10 and 2008-09 are given in table-V.

Table-V
Average wholesale prices of cardamom (large)
(Price in ₹/kg.)

Market centre	Grade	2009-10 (April-March)	2008-09 (April-March)
Gangtok	Badadana	245.03	127.76
Siliguri	Badadana	267.42	147.35

Prices of other spices

The average prices of major spices are given below. These prices have been collected from secondary sources like Chamber of Commerce, Indian Pepper and Spice Trade Association, Market reviews prepared by the Merchants Associations, etc. Prices of major spices in important market centers are given in table VI.



Table-VI

Prices of major spices in important market centers

(Price in ₹/Kg.)

Major Spice	Market	Grade	2009-10	2008-09
Pepper	Cochin	MG -I	136.42	129.30
Chilli	Guntur		50.75	48.11
Ginger	Cochin	Best	127.47	92.12
Turmeric	Cochin	AFT	71.76	43.39
Garlic	Mumbai		41.24	12.96
Coriander	Mumbai	Indori Asta	42.00	66.98
Cumin	Mumbai		107.06	101.05
Celery	Mumbai		45.37	54.88
Fennel	Mumbai		99.40	59.18
Fenugreek	Mumbai		30.57	32.28
Ajwan seed	Mumbai		94.35	65.00
Dill seed	Mumbai		58.00	50.50
Mustard seed	Delhi		32.26	33.89
Tamarind	Mumbai		27.08	26.81
Clove	Cochin		310.00	279.85
Nutmeg	Cochin	Without shell	287.43	241.15
Mace	Cochin		500.66	424.63
Saffron	Delhi		2,70,162.00	1,92,945.00
Vanilla	FOB Export price	Cured beans	1,234.50	800.05

Export performance of spices from India

The major item wise export of spices from India during 2009-10 compared to 2008-09 and the achievement over target are given in table VII & VIII



Table - VII
Export of spices from India during 2009-10 compared with 2008-09

(Qty. in Tonnes, Value in ₹ Lakhs)

Item	2009-10		2008-09		% Change in 2009-10	
	Qty	Value	Qty	Value	Qty	Value
Pepper	19,750	31,392.50	25,250	41,373.50	-22	-24
Cardamom(S)	1,975	16,570.25	750	4,726.50	163	251
Cardamom(L)	1,000	1,788.60	1,875	2,280.75	-47	-22
Chilli	2,04,000	1,29,172.80	1,88,000	1,08,095	9	19
Ginger	5,500	4675.00	5,000	3,482.50	10	34
Turmeric	50,750	38,123.00	52,500	24,857.75	-3	53
Coriander	47,250	22,585.50	30,200	20,378.75	56	11
Cumin	49,750	54,824.50	52,550	54,400.00	-5	1
Celery	5,000	2,662.50	3,650	2,333.00	37	14
Fennel	6,800	5,623.60	8,675	4,315.00	-22	30
Fenugreek	21,000	6,972.00	20,750	7,175.25	1	-3
Other Seeds (1)	15,500	5,890.00	17,500	6,498.50	-11	-9
Garlic	10,750	3,042.25	760	350.25	1314	769
Nutmeg & Mace	3,275	9,186.50	2,155	6,074.75	52	51
Vanilla	200	2,251.50	305	2,670.00	-34	-16
Other Spices (2)	20,200	12,524.00	20,000	10,564.00	1	19
Curry Powders/Paste	14,300	18,918.50	13,250	16,375.00	8	16
Mint Products (3)	19,000	1,18,972.00	20,500	1,42,025.00	-7	-16
Spice oils & Oleoresins	6,750	70,875.00	6,850	72,050.00	-1	-2
Total	5,02,750	5,56,050.00	470,520	5,30,025.50	7	5
Value in Million US\$		1,173.75		1,168.40		5

(1) Include mustard, aniseed, ajwanseed, dill seed, poppy seed etc.

(2) Include tamarind, asafoetida, cassia, saffron etc.

(3) Include mint oils, menthol & menthol crystal.

Source : Estimate based on DLE from Customs, DGCI & S, Kolkata, Exporters Returns, Report from RO's .



Table – VIII
Export of spices from India during 2009-10 compared with target
(Qty. in Tonnes, Value in ₹ Lakhs)

Item	Target for 2009-10		Export during 2009-10		% Achievement of target	
	Qty	Value	Qty	Value	Qty	Value
Pepper	25,000	28,750	19,750	31,392.50	79	109
Cardamom(S)	650	2,765	1,975	16,570.25	304	599
Cardamom(L)	1,500	1,800	1,000	1,788.60	67	99
Chilli	2,00,000	96,000	2,04,000	1,29,172.80	102	135
Ginger	8,000	4,560	5,500	4,675.00	69	103
Turmeric	51,000	22,950	50,750	38,123.00	100	166
Coriander	27,000	16,200	47,250	22,585.50	175	139
Cumin	29,000	20,880	49,750	54,824.50	172	263
Celery	3,500	1,925	5,000	2,662.50	143	138
Fennel	5,000	2,500	6,800	5,623.60	136	225
Fenugreek	10,500	3,675	21,000	6,972.00	200	190
Other Seeds (1)	8,000	2,800	15,500	5,890.00	194	210
Garlic	1,600	540	10,750	3,042.25	672	563
Nutmeg & Mace	1,500	3,750	3,275	9,186.50	218	245
Vanilla	250	1,875	200	2,251.50	80	120
Other Spices (2)	21,000	9,345	20,200	12,524.00	96	134
Curry Powders/Paste	12,500	14,935	14,300	18,918.50	114	127
Mint Products (3)	22,000	1,43,000	19,000	118,972.00	86	83
Spice oils & Oleoresins	7,000	71,750	6,750	70,875.00	96	99
Total	4,35,000	4,50,000	5,02,750	5,56,050.00	116	124
Value in Million US\$		1,000.00		1,173.75		117

(1) Include mustard, aniseed, ajwanseed, dill seed, poppy seed etc.

(2) Include tamarind, asafoetida, cassia, saffron etc.

(3) Include mint oils, menthol & menthol crystal.

Source : Estimate based on DLE from Customs, DGCI & S, Kolkata, Exporters Returns, Report from RO's .



Export of spices and spice products from India has crossed five lakhs tonnes for the first time during the year 2009-10. Despite the economic slowdown in major consuming markets, the export of spices has recorded an all time high both in volume and value in 2009-10. The export during the year has been 5,02,750 tonnes valued ₹ 5,560.50 crores (US \$1,173.75 million) against 4,70,520 tonnes valued ₹ 5,300.25 crores (US \$1,168.40 million) in the last financial year. Compared to last year, the export has shown an increase of seven per cent in volume and five per cent in rupee value. In dollar terms, the increase is 0.5per cent.

The spices export during 2009-10 has also exceeded the target in terms of volume, rupee value and dollar terms of value. Against the export target of 4,35,000 tonnes valued ₹ 4,500.00 crores (US\$ 1,000.00 million) for the year 2009-10, the achievement of 502,750 tonnes valued ₹5,560.50 crores (US\$ 1,173.75 million) is 116 per cent in quantity, 124 per cent in rupee value and 117 per cent in dollar terms of value.

In the export basket of spices and spice products, spice oils and oleoresins including mint products like mint oils, menthol crystals, and menthol powder contributed 34 per cent of the total export earnings. Chilli contributed 23 per cent followed by cumin 10 per cent, turmeric seven per cent and pepper six per cent. During the year 2009-10, Indian spices and spice products reached more than 140 countries in the world. The leading among them are USA (16 per cent), Malaysia (eight per cent), China (seven per cent), UAE (six per cent), and UK (five per cent). A detailed review on export of major spices from India during 2009-10 is given below.

Pepper

In recent years, Indian pepper production is stagnant around 50,000 metric tonnes due to low productivity of aged and disease affected pepper plantations. Our competitors like Vietnam with an annual production of almost double that of India has now become one of the major suppliers of pepper in the international markets. However, Indian pepper fetches a premium price in major markets because of its preference and intrinsic qualities. During the year 2009-10, India has exported a total quantity of 19,750 tonnes of pepper valued ₹313.93 crores as against 25,250 tonnes valued ₹ 413.74 crores of last year, registering a decline of 22 per cent in volume and 24 per cent in value. Export of pepper to major destinations like USA, EU etc. have declined during the year. Compared to Vietnam, the major supplier of pepper in the international market with higher productivity and lower cost of production, Indian offers are uncompetitive. It is reported that, due to economic slow down, the major US companies are keeping low inventories resulting in low import volume. USA continued as our major market for pepper and has imported 8,525 metric tonnes, accounting for 43 per cent of our total export of pepper. The other major buyers are the UK (1,600 metric tonnes), Canada (895 metric tonnes), Germany (880 metric tonnes), Italy, (835 metric tonnes) and Japan (600 metric tonnes).

Cardamom (Small)

Export of Cardamom (Small) from India during 2009-10 is an all time high in terms of value. During 2009-10, India exported 1,975 metric tonnes of Cardamom small valued ₹ 165.70 crores as against 750 metric tonnes valued ₹ 47.27 crores in 2008-09, registering an increase of 163 per cent in volume



and 251 per cent in value. The reported decline in supply from Guatemala, the largest supplier, is the major reason for the jump in export of Cardamom (Small) from India. Saudi Arabia accounts for 1,115 metric tonnes (56 per cent) of our exports followed by UAE (300 metric tonnes), Kuwait (85 metric tonnes), Egypt (75 metric tonnes) and UK (55 metric tonnes). Our exports mainly consist of high quality grades like AGEB and AGB to Middle East markets especially to Saudi Arabia. The production of Cardamom Small during 2009-10 was 10,075 metric tonnes as against last year's production of 11,000 metric tonnes. Due to the low availability from Guatemala, the average export price of cardamom has reached ₹ 839.00 per kg in 2009-10 from ₹ 630.20 per kg in 2008-09.

Cardamom (Large)

During the year India has exported 1,000 metric tonnes valued ₹17.89 crores as against 1,875 metric tonnes valued ₹ 22.81 crores in 2008-09. Pakistan is the major buyer of Indian large cardamom accounting for 600 metric tonnes (60 per cent) in 2009-10 followed by UK (80 metric tonnes) and UAE (60 metric tonnes). India and Nepal are the major producers of Cardamom (large). On an average we import about 5,000 metric tonnes of cardamom (large) from Nepal to meet the strong domestic demand. During 2009-10, Indian production was 4,180 metric tonnes; little less than last year's production of 4300 metric tonnes. The average domestic price has reached ₹ 411.75 per kg in March 2010 as against ₹125.00 per kg in March 2009.

Chilli

Chilli is the largest spice item exported from India in terms of both volume and value. During 2009-10, Chilli accounts for 41 per cent in volume and 23 per cent in value terms of total export of spices from India. During the year, India has exported 204,000 tonnes of Chilli and Chilli products valued ₹1291.73 crores as against 188,000 tonnes valued ₹1080.95 crores of last year. The mandatory quality testing of chilli and chilli products by the Board has made the Indian chilli more acceptable in the international markets and helped to achieve this higher level of export in chilli. The traditional buyers of Indian chilli viz Malaysia, Sri Lanka, Bangladesh and Indonesia were active in the market. However, export to Pakistan has reduced considerably during the year (175 metric tonnes) as compared to last year (22,375 metric tonnes). During 2009-10, our export to Malaysia was 45,525 metric tonnes followed by Sri Lanka (34,800 metric tonnes), Bangladesh (28,175 metric tonnes), UAE (23,250 metric tonnes) and USA (17,750 metric tonnes).

Ginger

The export of Ginger from India during 2009-10 has been 5,500 metric tonnes valued ₹ 46.75 crores as against 5,000 metric tonnes valued ₹34.83 crores in 2008-09. Ginger is mainly exported in fresh, dry and powder forms. Fresh ginger export, which accounts for more than 50 per cent in volume, is from the North Eastern States and the major destination is Bangladesh. During 2009-10, the major buyers of Indian dry ginger are the UK (495 metric tonnes), Saudi Arabia (435 metric tonnes), USA (365 metric tonnes) and Spain (335 metric tonnes).



Turmeric

Export of turmeric from India during 2009-10 is an all time high in terms of value. The export has been 50,750 metric tonnes valued ₹ 381.23 crores as against 52,500 metric tonnes valued ₹ 248.58 crores. During 2009-10, the average domestic price has gone up to ₹127.47 per kg as against ₹ 92.12 per kg in 2008-09. The major buyers are UAE (6675 metric tonnes), Iran (4,255 metric tonnes), Bangladesh (4,120 metric tonnes), Malaysia (3,955 metric tonnes) and Japan (3,150 metric tonnes). India is the largest supplier of turmeric in the world market. The other major suppliers are Vietnam, Indonesia and Myanmar. It is reported that the medicinal and cosmetic use of turmeric is increasing significantly over the years.

Seed spices

The export of seed spices has shown increase both in quantity and value terms during 2009-10 as compared to last year. Export of major seed spices like Cumin, Coriander, Fennel and Celery has recorded all time high in value terms during 2009-10. The export of seed spices accounts for 29 per cent in volume and 18 per cent in value of the total export of spices from India.

During 2009-10, the export of cumin seed from India has been 49,750 tonnes valued ₹548.25 crores against 52,550 tonnes valued ₹544.00 crores in 2008-09. The major buyers are UAE (5,760 metric tonnes), Brazil (4,940 metric tonnes), USA (4,050 metric tonnes), Nepal (3,750 metric tonnes) and UK (3,450 metric tonnes). The export of coriander seed during 2009-10 has been an all-time high both in terms of volume and value and the export has been 47,250 metric tonnes valued ₹225.86 crores as against 30,200 tonnes valued ₹203.79 crores of last year registering an increase of 56 per cent in volume and 11 per cent in value. The major markets are Pakistan (10,700 metric tonnes), Malaysia (8,985 metric tonnes), UAE (7,175 metric tonnes) and Saudi Arabia (4,200 metric tonnes).

Nutmeg and Mace

Nutmeg and Mace export from India has shown a steady increase in recent years. During 2009-10, export of Nutmeg and mace has been 3,275 metric tonnes valued at ₹ 91.87 crores as against 2,155 metric tonnes valued at ₹ 60.75 crores registering an increase of 52 per cent in volume and 51 per cent in value. The major markets during 2009-10 are UAE (925 metric tonnes) followed by Vietnam (585 metric tonnes), Singapore (380 metric tonnes) and USA (230 metric tonnes).

Processed spices

The export of processed spices like Curry powder and Spice oils & oleoresins, Mint products and Spice powders account for 53 per cent of the total exports. Major items among the processed spices are Spices oils & Oleoresins, Curry powder & blends, Mint products like Menthol, Menthol Crystal & Mint Oils.

During the year 2009-10, a total quantity of 14,300 tonnes of curry powder and blends valued ₹ 189.19 crores has been exported as against 13,250 tonnes valued ₹ 163.75 crores of last years,



registering an increase of eight per cent in volume and 16 per cent in value. The export of Curry powder during 2009-10 is an all time high both in terms of quantity and value. The UK is the largest buyer of Indian curry and spice blends accounting for 3100 metric tonnes (22 per cent), followed by Saudi Arabia (1455 metric tonnes), UAE (1,260 metric tonnes) and USA (1,200 metric tonnes).

However, during 2009-10, the export of Spice oils and oleoresins has registered a slight decline in export as compared to last year and the export has been 6,750 metric tonnes valued ₹ 708.75 crores as against 6,850 metric tonnes valued ₹ 720.50 crores of last year. The economic slow down in major consuming markets like USA and EU has adversely affected the export of this value added item. The major spice oils exported from India are Pepper Oil (75 metric tonnes), Nutmeg Oil (45 metric tonnes), Mustard seed Oil (40 metric tonnes), Clove Oil (22 metric tonnes), Celery Seed Oil (17 metric tonnes) and Ginger oil (15 metric tonnes). In the case of Oleoresins, Paprika Oleoresin is the largest item (2,400 metric tonnes) exported from India followed by Capsicum Oleoresin (1,350 metric tonnes), Pepper Oleoresin (1,100 metric tonnes), Garcinia extract (575 metric tonnes) and Turmeric Oleoresin (325 metric tonnes). USA is the largest importer of spice extracts accounting for 25 per cent (1,650 metric tonnes) of our exports. Other major markets are Germany (675 metric tonnes), UK (530 metric tonnes), South Korea (385 metric tonnes) and China (310 metric tonnes).

Mint products viz Mint oils, Menthol Crystal and Menthol Powder is the second largest product group in the export basket accounting for 21 per cent of our spices export. The export of mint products during 2009-10 has been 19,000 metric tonnes valued ₹ 1189.72 crores against 20,500 metric tonnes valued ₹ 1,420.25 crores in 2008-09. Export to China (6,375 metric tonnes) and USA (4,450 metric tonnes) accounts for more than 56 per cent of our exports. The other major markets are Singapore (2,000 metric tonnes), Germany (1,150 metric tonnes), Brazil (775 metric tonnes) and Netherlands (575 metric tonnes).



10. INFORMATION TECHNOLOGY AND ELECTRONIC DATA PROCESSING

The Board has a full-fledged EDP division to carry-out the following activities.

- (1) Advise, guide and assist various departments and offices of the Board for the effective use of Information Technology.
- (2) Help desk management of existing applications, messaging solutions, internet and web site maintenance.
- (3) Administration of organization wide IT resources namely hardware, software, databases, networking and peripheral equipments.
- (4) Formulate strategies for technology acquisition, integration and implementation.
- (5) Upgradation of IT infrastructure.
- (6) Defining and implementing systems and procedures for the smooth functioning of IT equipments and Software.
- (7) Data processing.
- (8) Identify the need for new systems (or modifications to existing systems) or respond to requests from users.
- (9) Design, development, documentation, testing, implementation and maintenance of Information Systems and application software.
- (10) Maintenance and updation of Board's web sites Indianspices.com, spicesboard.in, Indianspices.org.in, worldspicecongress.com, spicesboard.org.
- (11) Formulate and conduct Computer training programmes.

Software packages have been developed and implemented in the following areas:

- Trade Information Service
- Registration and licensing
- Electronic Auction of small cardamom.
- Pre-shipment sampling
- Monitoring receipt, analysis and delivery of Spice samples received for quality evaluation.
- Analysis of analytical data of the Quality Evaluation Lab to assess the incidence of physical, chemical and microbial contaminants.
- Financial Accounting and Pay roll.
- Interest bearing loans
- Personnel Information, leave accounting and income tax assessment.
- Library Cataloguing, circulation and control of external documents.



- Market Survey Analysis.
- Area and Production Surveys.
- Implementing and monitoring of schemes and programmes
- Maintenance of subscriber addresses, monitoring of subscription expiry and mailing of periodical publications.
- Receipt and issue of consumables and maintenance of assets.
- Maintenance and accounting of provident fund and pension scheme for casual labourers.

Major activities in the field of information technology during 2009-10 are:

- (1) Upgradation of IT infrastructure namely:-
 - (a) Server, UPS and other IT equipments in Guntur Quality lab
 - (b) New Server in e-auction centre, Vandanmedu
 - (c) PCs, UPS and Printers in all new offices in Idukki district.
 - (d) Upgraded existing IT infrastructure in Head office, Quality Evaluation Labs in Kochi and Mumbai, Regional Offices, Zonal Offices and Field Offices.
- (2) Implemented Web Portals for Board's Employees, Offices and Pensioners.
- (3) Online facility made available in Board's intranet www.spicesboard.in for
 - (a) Employees to submit application for GPF advance/withdrawal and obtain the status of this application and up to date GPF balance.
 - (b) Office/employees to track submission of APAR self-appraisal/reporting) and property return.
 - (c) Traders to know the status of applications submitted for registration and licensing.
- (4) Software viz., 'PRIDE' developed and implemented in Field Offices of Idukki for pepper replanting & rejuvenation project (NHM). Office data was transferred to Head office successfully for arranging e-payment to farmers.
- (5) Started development of an online web enabled systems for computerizing field level activities.
- (6) Implemented new financial accounting system in collaboration with Accounts department and external service provider.
- (7) Board's web site www.indianspices.com has been updated on regular intervals. Large number of trade enquiries were received through the site. Database of trade enquiries was maintained. Marketing, Publicity and TIS departments utilized this database for Foreign Trade Enquiries Bulletin and Importers directory.
- (8) Computerized receipt, request, issue and stock of consumables in Head office.
- (9) Developed and implemented software for file archival.



ANNEX - I

LIST OF BOARD MEMBERS AS ON 31.3.2010

1. Shri. V.J. Kurian, IAS
Chairman
Spices Board,
Palarivattom,
KOCHI-682 025
Ph : 0484-2333304
Mob : 98470 65507
Fax : 0484-2349135
E-Mail : chairman@indianspices.com
2. Shri P.T. Thomas
Hon'ble MP (Lok Sabha)
307,Kerala House,
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Mob : 9447029595/9013180092/
09847077150
Fax : 04862-229595
E-mail : ptthomasidk@gmail.com
3. Shri Anant Kumar Hegde
Hon'ble MP (Lok Sabha)
13, Firoz Shah Road,
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Mob : 9868180337
Fax : 011-23795001
E-Mail : mpcanara@gmail.com
4. Shri Tiruchi Siva,
Hon'ble M P (Rajya Sabha)
15, Firoz Shah Road
New Delhi – 110 021.
Tel : 0431-2417676 / 2412977
Mob: 09868181955 / 09443160180
Fax : 0431-2412977
E-Mail : tiruchi.siva@sansad.nic.in
5. Shri Mangat Ram Sharma
Director in charge of Plantations Division
Department of Commerce
Ministry of Commerce and Industry
Udyog Bhavan
New Delhi-110 107
Ph : 011-23063268, 26492218
Mob : 9971554633
Fax : 011-23061646/23063418
E-Mail : mrsharma@nic.com
6. Shri. S.K.Pattanayak
Joint Secretary and Mission Director,
(National Horticulture Mission)
Department of Agriculture &
Co-operation,
Ministry of Agriculture
Krishi Bhawan,
New Delhi-110 001
Ph: 011 – 23381503/24358242
Mob: 9899772227
Fax: 011 – 23387669
7. Shri V.D.Alam
Director in charge of Finance Division
Department of Commerce,
Ministry of Commerce and Industry
Udyog Bhavan
New Delhi-110 107
8. Shri K.C. Pradhan
The Wayside Gardens
Sixth Mile,
Tadong-737 102,
Gangotk,
Sikkim



9. Adv. Shri Joy Thomas
Thundathil, Arakkulam P.O
Idukki,
Kerala -685 591
Ph : 04862-252240
Mob : 9447052134
10. Shri Roy K. Paulose
Konnanal, Thattakkuzha P.O,
(Via) Karimanoor,
Thodupuzha
Idukki, Kerala
Ph : 04862-235304, 222977
Mob : 9447421666
11. Shri Jose Kompanathottam
Anniartholu P.O.,
Kattapana,
Idukki,
Kerala, Pin-685 515
Ph : 04868- 270210
Mob : 9447087306
12. Shri G. Muraleedharan
Perumbalathu House,
Pampadumpara-685 556
Idukki,
Kerala
Ph : 04868- 236073
Mob : 9961149473
13. Shri Abul Kalam
Madeena Munavara Coffee Estate,
Jayapura -577 123,
Koppa Taluk
Chikmagalur Dist.
Karnataka
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Mob : 9448032796
Fax : 08265-245050
E-Mail : abulkalam_b@yahoo.co.in
14. Shri Bhaskar Singh Raghuwanshi
VIII, Baaskhedi
Distt. Guna
Madhya Pradesh
15. Dr. Viju Jacob
Director
M/s. Synthite Industries Ltd.,
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Kerala,
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Mob : 9846640010
Fax : 0484-3051351
E-Mail : viju@synthite.com
16. Shri Mathavan
Partner
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spgr@sancharnet.in
17. Shri Ajay J. Mariwala,
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M/s. Vallabhdas Kanji Ltd.,
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Mob : 9846093333
Fax : 0484-3077781
E-Mail : vkl@vklspices.com



18. Dr. N. Murughasan,
Chairman,
M/s. Exim Rajathi India Pvt. Ltd.,
Gulam Towers, No.46, 47, 48 & 59
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Chennai-600 014
Ph : 044-42210666
Mob : 9840129666
Fax : 044-42160663
E-Mail : exim@rajathi.com
19. Shri Rajendra P. Ghogale
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M/s. A.M. Todd Co. India Pvt. Ltd.,
20, Rajmahal, 84 Veer Nariman Marg
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Mob : 09967312000
Fax : 022-22821788
E-Mail: raj_ghogale@yahoo.com
20. Smt. Sushama Srikandath
Director and Chief Operating Officer
M/s. AVT Mc Cormick Ingredients Pvt. Ltd.
South Vazhakulam,
Aluva-683 107
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Mob : 9895177511
Fax : 0484-2677275
E-Mail : sushama@avtspice.com
21. Shri Philip Kuruvilla,
Managing Director
M/s. Indian Products Ltd.,
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Kochi-682 002
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Mob: 9364333117
Fax : 0422-3985710
E-Mail : philip@jayanthi.com
22. Shri P.J. Kunjachan
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Mob : 9895977371
Fax : 0484-2622612
E-Mail : pj@arjunanatural.com
23. Shri Jojo George
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24. Shri George Vally
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Fax : 0481-2568918
E-Mail : georgevaly@gmail.com
25. The Secretary to Government
Agriculture Department
Government of Kerala
Govt. Secretariat
Thiruvananthapuram-695 001



26. The Principal Secretary
(Agriculture & Horticulture)
Government of Rajasthan,
Government Secretariat,
Jaipur,
Rajasthan
27. Shri K.K.Singh
Principal Director
Horticulture & Cash Crops
Development Department
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Tadong Gangtok,
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Telefax: 03592 231960
28. Smt. Sutapa Majumdar
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Planning Commission
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E-Mail : sutapa.m@nic.in
29. Shri N. C. Saha
Director,
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E-Mail : director-iip@iip_in.com
30. Dr. V. Prakash
Director,
Central Food Technological
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31. Dr.V.A. Parthasarathy
Director,
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Calicut-673 012
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Fax : 0495-2731187
E-Mail : parthasarathy@spices.res.in

Crop Development Programmes



Shri.M.I.Shanavas M.P. Wyand is seen inaugurating the Growers meet cum seminar on Black Pepper at Pulpally in Wyand district in Kerala.



Shri.Sonam Gytaso Lepcha, Hon'ble Minister for Energy, Power & Cultural affairs, Government of Sikkim distributing the replanting subsidy cheque to a large cardamom grower at Lower Dzongu in Gangtok.



Dr.Takat Singh Rajpurohit of Rajasthan Agriculture University addressing the farmers in Gurlai in Rajasthan during the field publicity campaign organized by the Board on quality requirements in seed spices.



Seed spices farmers assemble at the Panchayath Bhavan in Giridara village in Pali district, Rajasthan (Field Publicity campaign)



A view of training programme for Extension personals of NGO's held in Kachucherra in Agartala



A team of farmers and Officials from State Horticulture Department of North Eastern States at Spices Board's head office to attend a training on post harvest technology and organic farming.



A master training programme for Officers of State Agri/Horticulture in progress in Agartala in Tripura state.



Shri.Eswaran, Panchayath President, addressing the tribal cardamom farmers in one of the quality improvement training programmes held at Vellicholai in Kolli hills in Namackkal district in Tamil nadu.

Crop Development Programmes



A view of farmers from Churachandpur district in Manipur State who visited the Board's Head Quarters in Cochin in connection with the Training Programme on Post harvest Technology and Organic farming.



A quality improvement training programme on spices in progress in Siddapura in Karnataka.



A view of Agri/Horticulture officers attending a master training programme on ginger and turmeric at Churachandpur in Manipur.



Shri. Devarajappa, Deputy Director (Horticulture) Kodagu in Karnataka is seen delivering the inaugural address during the master training programme on pepper.



A scene from the quality improvement training programme on Large cardamom held at Dokchin area of Rongli sub division of East Sikkim district.



A view of farmers attending a quality improvement training on ginger and organic farming at Reiek village in Mamit district, Mizoram.



Shri. H.K. Kumaraswamy, MLA delivering the inaugural address during the regional seminar on organic farming of spices at Ballupet in Karnataka.



A view of cardamom planters attending a training programme on cardamom at Kallupalam near Udumbanchola in Idukki district, Kerala.

Export Development Programmes



Shri. Jyotiraditya M. Scindia, Hon'ble Union Minister of State for Commerce & Industry, Government of India lighting the lamp to mark the inauguration of the 10th World Spice Congress in New Delhi.

Shri. T. Nandakumar IAS, Secretary, Agriculture, Government of India, inaugurating the 10th World Spice Congress Exhibition in New Delhi.



A view of the audience attending the 10th World Spice Congress.

Shri. Jyotiraditya M. Scindia, Hon'ble Union Minister of State for Commerce & Industry, Government of India, is seen interacting with the prospective investors and exporters during the Interface meeting to explore the feasibility of establishing a Spice Park at Shivpuri in Madhya Pradesh.



Export Development Programmes

Shri.V.J.Kurian IAS, Chairman, Spices Board explaining the series of measures taken by the Spices Board for the development of spice industry in the Interface meeting.



Shri.S.Rethinavelu, Senior President of Tamil Nadu Chamber of Commerce & Industries is seen inaugurating a seminar on Spice Exports in Madurai.

A group of cardamom planters from Tamil Nadu are being explained the method of conducting of Cardamom E-auction at Vandanmettu in Idukki district, Kerala.



Mrs.G.L.Tshering, Executive Magistrate addressing during the inauguration of Large Cardamom Auction in Kalimpong in Darjeeling district of West Bengal.

Publicity & Promotion Programmes



Shri. Anand Sharma, Hon'ble Union Minister of Commerce & Industry, Government of India listening to the briefing of Board's officials at the Board's stand at the The India Show at St. Petersburg, Russia held at Lenexpo.



Shri. V.J. Kurian IAS, Chairman, Spices Board (left) with Shri. Pradip K. Kapoor, Indian Ambassador to Chile (middle) during the Board's participation in the Sixth International Trade Fair held at Santiago, Chile.



Dr. M. Beena IAS, District Collector, Cochin (middle) visiting the Spices Board's stall organized during the Haritholsavom 2009 held at Maradu in Cochin.



Shri. Keshavendra Kumar, IAS, is receiving the first copy of the book in Hindi "Administrative and Scientific Terminology" from Smt. K. Lekshmi Kutty, Secretary, Spices Board.



Shri. Ashok Gehlot, Hon'ble Chief Minister of Rajasthan (centre) is being received at the Board's stand during Marwar Krishi Utsav-2009 in Jodhpur.



U.S. investors in food processing in India along with Shri. K.K. Phull, Under Secretary, Department of Commerce, Government of India (third from right) at the Board's stand in FOODEX 2010 Tokyo, Japan.



A view of Board's stand in Sweet Eurasia in Istanbul, Turkey.



Business discussions in progress in the IFT 2009 Annual meeting and FoodExpo held at Anaheim Convention Centre, California, USA.



A view of Board's stand in Biofach 2010 held at Nuremberg, Germany.



Crowd of visitors in front of the Spices Board's stand to taste the food at the Fine Food Australia Show in Sydney.

Publicity & Promotion Programmes



Mrs.Reva Ganguly Das, Indian Consul General in Shanghai,China at the Board's stand at SIAL, China.



From left to right- Shri.Manish Shankar Sharma, IPS, Director, Tea Promotion, Tea Board, Dubai and Shri.Sanjay Singh IFS, Indian Ambassador to Iran at the Spices Board's stand in Iran Agro Food 2009 in Tehran.



Board's officials interacting with the visitors at the Board's stand in World Food Ukraine in Kiev.



Business discussions in progress at the Board's stand in Gulfod Dubai.



Dr.Sumit Seth, Second Secretary (centre) and Mr.Andres Ortiz Rodriguez, Marketing & International Trade (left) with Shri.S.Kannan, Director (Marketing) in the International Trade Fair in the Columbian capital Bogota.



The Indian Ambassador to Egypt Shri.Swaminathan (left) visiting the Spices Board's stand in Cairo International Trade Fair in Cairo.



A view of Spices Board's stand in Ingredients Russia held in Moscow.



Board's officials interacting with the business visitors at the 16th Saudifood held in Riyadh, Kingdom of Saudi Arabia.



Ms.Roshini Sen, IAS, Deputy Chairperson, Tea Board is seen visiting the Board's stand in UPASI, Industrial Exhibition held at Coonor.

Research Programmes



Shri. Jyotiraditya M. Scindia, Hon'ble Union Minister of State for Commerce & Industry, Government of India, is seen visiting the research activities of small cardamom in the Plant Pathology division of Indian Cardamom Research Institute, Myladumparai in Idukki district, Kerala.

Dr. J. Thomas, Director (Research) and Scientists interacting with the cardamom planters from Attapady village in Tamil Nadu.



Attapady farmers visiting the replanted cardamom plot of an elite cardamom planter near Udumbanchola in Idukki district, Kerala.

Fr. Vicar Mathew Thadathil addressing the cardamom planters during the Mobile Agri Clinic & Scientist Farmer Interface held at Kallupalam in Idukki district, Kerala.



Research Programmes



A team of Scientists from Indian Cardamom Research Institute, Spices Board visiting a cardamom plantation in Idukki district and suggesting the remedial measures for white fly attack.

A view of cardamom planters of Santhanpara area attending a Agri Clinic and quality improvement seminar held at Puthady in Idukki district.



A view of cardamom planters of attending the Agri-clinic scientist farmers Interface

A scene from the training programme on Good Agricultural Practice on spices held at ICRI, Regional Research Station, Sakleshpur, Karnataka.

