



WORLD SPICE ORGANISATION

UPDATES and WAY FORWARD A Report

27 September 2011

The world spice organisation after its inception has been actively fulfilling its promises and proactively searching out new areas to pursue.

We are happy to be sharing this report with you – it contains details on missions accomplished, projects that have been initiated, and an invitation to collaborate with you and every other spices/herbs industry stakeholder.

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WSO has streamlined its efforts, to focus on the 'farm' - solving industry problems beginning at the grass root level.

1. **Grain and Feed Trade Association, GAFTA is now a member at WSO**

GAFTA is an international trade association promoting international trade in agricultural products, having over 1328 Members in 86 countries. WSO and GAFTA will work together on programs aiming at sustainability, in India and other origins.

2. **Collaboration with Indian Institute of Spice Research (IISR) and Ministry of Food Processing Industries (MoFPI)**

WSO has entered into an agreement with IISR, under the guidance of MoFPI - to trace and control adulterants in spices.

3. **Campaign against Aflatoxin contamination in Nutmeg**

The Indian Spice Industry has been grappling with Aflatoxin contamination in Nutmeg and Mace. Working together with the Spices Board, WSO arranged awareness programs to address the menace, through farm improvements. The campaign stresses on the importance of proper drying, and the techniques of doing so in difficult climatic conditions.

CAMPAIGN WORKING COMMITTEE:

The working committee constituted to rid Nutmeg of Aflatoxin, in India:



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- Dr. Johny J Kannampally and Mr. Sacaria - Prominent nutmeg growers

- Mr. Philip Kuruvilla - Chairman, World Spice Organisation
- Mr. B Sreekumar, Spices Board

CAMPAIGN STRUCTURE:

1. Awareness campaigns at the growing areas.
2. Publications detailing scientific methods of production, and pre-harvest methods.
3. Dedicated space for Aflatoxin prevention in Magazine – Spice India (This magazine is subscribed to, by farmers, traders, and other spice industry stakeholders. It is translated into the regional languages and widely distributed in the growing areas)
4. Programs on major regional television channels broadcasting Good Agricultural Practices - from nursery to pre-harvest for Nutmeg.

CAMPAIGN LOCATION:

Ponkunnam (Kottayam district), Edakunnam, Pariyaram, Meenakshipuram, Erattupettah, Adimali and Kanjoor, Thamarassery (Kozhikode District), Karuvarakundu (Malappuram District) and Vaikom (Kottayam District) and extend to other nutmeg growing areas on the Konkan coast, including Raigad district in Maharashtra.

Kerala was selected as the campaign launch point as it is a major producing centre of nutmeg and mace. (Annual production between 4,000-5,000 tonnes)

CAMPAIGN KNOWLEDGE RESOURCES:

- Agricultural experts from Manufacturer/Exporter companies
- Progressive Farmers
- Scientists from Indian Institute of Spices Research
- Experts from Kerala Agriculture University
- Scientists from Spices Board

Continuous follow-up programs are reinforcing the campaigns and the learning derived. WSO Chairman presided over a meeting (26.08.2011) that brought together Nutmeg farmers, exporters, scientists and Government Officials, enabling exchange of information and a unified direction of thought.



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4. WSO's Expert Panel of Scientists - a source of knowledge to the world

WSO is in the process of creating a panel of experts – agronomists, agriculturist, biotechnologists, and scientists – who will help us plan/implement sustainable agricultural programs.

The expert panel will focus primarily on 10 focus spices identified - Pepper, Chillies, Paprika, Cumin, Cardamom, Ginger, Turmeric AFT, Mint and Garlic - across all areas starting from soil health, seeds program, disease resistant crops, new cultivation practices (enhancing land productivity and water use efficiency), new generation low residual pesticides/bio-fertilizers.

The key issues identified against each spice are as follows:

1. **Hot Chillies:** Food safety, esp. in the areas of IPM
2. **Paprika:** Non-availability
3. **Pepper:** Short supply and Non-availability of quality produce
4. **Cardamom:** Pesticide Contamination
5. **Nutmeg:** Aflatoxin issues
6. **Garlic:** Quality and Flavor Issues
7. **Cumin:** Pesticide contamination
8. **Mint:** Trade and supply related issues
9. **Turmeric (AFT)** Supply scarcity
10. **Ginger:** Sustainability

The activities of the panel would be research driven. Many spice crops like Paprika, Pepper, Garlic and AFT require focused research to increase active ingredient content, develop high yielding varieties, etc. The focus would also lie on developing varieties that are less dependent on fertilizers and pesticides.

The panel will also offer consultation and assistance to Spice associations, Government Bodies of Spice growing countries, Manufacturers, Spice Farmers and Official regulatory bodies, so that there is a pool of resources to be used across the world – a source of technical direction and expertise to the entire industry. This function can be provided to spice producers, on a need basis.

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*The WSO expert panel
will form the foundation
of our ambitions towards
food safety and
sustainability.*



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5. **WSO will work with Spices board, India to solve challenges in product quality in Chillies**

Chilli is an important product in India's basket of spice exports and it accounts for 45% of total quantity exported and 22% of foreign exchange earned for the year 2010 – 2011. India is a major exporter of Chilli (Oleoresins, Ground/Crushed/Raw Steam Sterilized Chilli, etc) to the US and EU Markets.

Recently, the industry has been facing problems due to the occurrence of Aflatoxins, Pesticides and other contaminants. Indian manufacturing technology is advanced to handle global processing standards, but external contaminant prevention requires intervention at the farm level – something the World Spice Organisation has taken up.

Chilli has been a traditional cash crop in the country. (Main chilli growing areas are Andhra Pradesh, Karnataka, Orissa, Gujarat and Tamil Nadu). Chilli crop is highly susceptible to pest infestation – Insects (Helicoverpa, Spodoptera, Mites, Thrips), Fungi (Anthracnose, Early Blight, Fruit rot).

It therefore, has become a practice to protect the crop by the use of pesticides/fungicides (Esp. Organochlorines, Organophosphates and Organosulphates) have been used in chilli cultivation. Prolonged use has left their marks on the soil – and these find their way into the fruits and therefore, the final product.

Efforts are on to change traditional practices, but these awareness programs will take time to show results because of the small size of land holdings of Indian Farmers.

Traditional areas of cultivation, tainted by years of pesticide abuse, cannot produce crops with the desired quality. It therefore, becomes necessary to initiate cultivation in non-traditional areas, implementing Good Agricultural Practices right from the start.

It is also necessary to take up the same at a larger scale and at a higher level than that can be handled by individual companies. Government involvement and expertise is inevitable – to have complete control over quality, right from the source.



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Exploring chilli cultivation in non-traditional areas – The Specifics

WSO is working with a consultant – M/s. Norr Advisors Pvt. Ltd., Gurgaon, detailing an extensive action plan for cultivating chilli in non-traditional areas in India. Industry has agreed to buy-back 4500 tons of chilli produced under this project.

WSO is taking a collaborative, consultative approach with all stakeholders –

- ✓ Discussions with the industry on fixing quantities, chilli varieties required, specifications (heat/color value), and inputs on safe pesticides. Garnered industry support, and identified manufacturers who are willing to enter into a buy back agreement with farmers/farmer groups, through NORR.
- ✓ Discussions scheduled with the Madhya Pradesh Government and farmers.
- ✓ The project will run under the auspices of the Spices Board, Commerce Ministry, Government of India. The chairman, spices board has approved the project and promised support and guidance.

Area of cultivation identified - Nimar plains - Khargone / Khandwa and Harda district (Madhya Pradesh, India)

Initial extent of cultivation - 5000 acres (There is additional area that can be expanded into depending on the requirements of the industry)

Other Projects on the anvil include:

- a. Working with FSSAI and Spices Board, India developing standards for the Domestic and Export industry for spices.
- b. Extending the work on nutmeg and chillies to the other focus spices - Pepper, Chillies, Paprika, Cumin, Cardamom, Ginger, Turmeric AFT, Mint and Garlic, jointly identified together with Spices Board, India.
- c. Approaching CODEX, FAO to work towards standardizing test methods.

We look forward to hearing from you on the above projects. We would appreciate your comments and advice.



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Kindly let us know if there are any projects, of a technical nature that you would want us to work on, on a priority basis.

We are looking forward to associating with you – to champion new causes that you hold dear, and as an execution partner in different locations across the globe.

Philip Kuruvilla,
Chairman,
World Spice Organisation