



BIORESOURCES DEVELOPMENT AND  
CONSERVATION PROGRAMME (BDCP)



INTERNATIONAL CENTRE FOR ETHNOMEDICINE  
AND DRUG DEVELOPMENT (INTERCEDD)



NIGERIA NATURAL MEDICINE  
DEVELOPMENT AGENCY (NNMDA)

# HerbFEST 2013

**A Herbs, health Foods and Natural Products Expo**

Raw Material Research and Development Council  
(RMRDC), Abuja.

October 08<sup>th</sup> -10<sup>th</sup> , 2013

# Organizers:

- **Bioresources Development and Conservation Programme (BDCP)**



- **Nigeria Natural Medicine Development Agency (NNMDA)**



- **International Centre for Ethnomedicine and Drug Development (InterCEDD).**





# Collaborators



- **The Association for the Promotion of Traditional Medicine (PROMETRA)**
- **Raw Materials Research and Development Council (RMRDC)**
- **National Institute for Pharmaceutical Research and Development (NIPRD)**
- **Federal Institute of Industrial Research, Oshodi (FIIRO)**
- **National Office for Technology Acquisition and Promotion (NOTAP)**
- **THE SUN\***
- **Consumer protection Council (CPC)**
- **Nigerian Export Promotion Council (NEPC)**
- **Independent Television ITV \*\*\***
- **National Agency for Food and Drug Administration and Control (NAFDAC)**
- **Small and Medium Enterprises Development Agency of Nigeria (SMEDAN)**
- **National Association of Traditional Medicine Practitioners (NANTMP)**
- **National Biotechnology Development Agency (NABDA)**
- **Nigerian Institute for Trypanosomiasis Research (NITR)**
- **Project Development Institute (PRODA)**
- **Natural Medicine Development Company (NMPDC)**
- **National Centre for Technology management (NACETEM)**





# BDCP

- **Bioresources Development and Conservation Programme (BDCP) is a not-for-profit, non-governmental, knowledge based organization dedicated to creating innovative mechanisms for sustainable development that encompass the interface between health and the environment.**
- **Goal is to provide communities with the tools and information they need to preserve their self-sufficiency in an increasingly industrialized world, while retaining as much of their cultural framework as possible.**



## NIGERIA NATURAL MEDICINE DEVELOPMENT AGENCY NNMDA

FEDERAL MINISTRY OF SCIENCE AND TECHNOLOGY

The Agency was established to enable the **Government** through **Federal Ministry of Science and Technology** actualize its critical and strategic mandate;

***To research, collate, document, develop, preserve and promote Nigeria's Natural Medicine defined as indigenous (traditional) health systems, medication and non-medication healing arts, sciences and technologies to assist contribute to improved healthcare delivery, wealth and job creation and national economic growth and development.***

and its **Mission:**

*To facilitate active national and international cooperative and collaborative research & development, documentation and promotion efforts for Nigeria's Natural Medicine, knowledge and endowments and engender the utilization of science, technology & innovation for the development and production of safe & efficacious traditional therapies and extracts and assist facilitate their integration into the national healthcare delivery system for improved healthcare delivery, job and wealth creation.*



# NNMDA (Cont'd)

To achieve its mandate and recognizing that the nation is blessed with a vast and diverse biodiversity and bioresources as well as enormous traditional (indigenous) medical knowledge, the Agency developed programs and projects aimed at maximizing these potentials for improved quality of life and national economic growth and development. Specifically, amongst others are:

- **Conducting extensive Ethno-medicinal and Veterinary Surveys aimed at the development of a comprehensive inventory of the national MAPs**
- **Developing a Dedicated Herbarium and Experimental farms nationwide**
- **Developing in volumes *Comprehensive National Inventory of Medicinal, Aromatic and Pesticidal Plants in Books titled Medicinal Plants of Nigeria covering the 6 geo – political zones and publication of the Book of Abstracts (published research findings)***
- **Training of TMPs to enhance products and practices that will enable them play active part in the bio-business sector**
- **Developing a Laboratory, Pilot Product Development Unit (PDU) and Development of Process Technologies for the primary efficacy and safety analysis of Herbal therapies to assist provide scientific and technical assistance to TMP entrepreneurs and health food producers**
- **Developing Digital Virtual Library – A dedicated Focal Reference Center which for the development and promotion of traditional medicine as well as promote e-commerce;**



# About InterCEDD

- InterCEDD conducts integrated research for drug development and commercialization of potentially useful natural products. The Centre provides a full services phytomedicine research facility that standardizes traditional remedies with clearly demonstrated safety and efficacy profiles. InterCEDD offers a broad range of research, development and analytic services including:
  - *Botanical Standardization*
  - *Processing and standardization of Herbal Products*
  - *Complete analytical testing*
  - *Natural products extraction, isolation and purification;*
  - *Access to a full herbarium and ethnobotanical database;*
  - *Formulation/reformulation of Herbal Products*
  - *Biological assays*
  - *Fully stocked Library*
  - *Laboratory evaluation of herbal products*
  - *Training*



# HerbFEST Concept



- Historically healthcare delivery, food, beverages, as well as health and beauty products especially in Africa had been supported by the indigenous flora and fauna of Africa
- Today, the renewed global focus supported with emergence of new technologies is arguably on the sustainable utilization of plants and genetic materials in the development of new products in the agricultural, food, pharmaceutical and cosmetics industry, with a global market exceeding US\$100b
- This represents tremendous opportunities for natural products manufacturers in Nigeria and the ECOWAS sub-region.
- HerbFEST is conceived and originated by **BDCP** and is aimed to stimulate the natural products and bio-business industrial sub-sector in Nigeria and the ECOWAS sub-region, and enhance its capacity for delivery of new health foods to the EU & the US market under the Africa Growth and Opportunity Act (AGOA), and diversify the export base of the local economy.
- **The first HerbFEST in Nigeria took place in 2003 solely organized by BDCP**
- **NNMDA, InterCEDD and stakeholders became partners in 2009**
- Against this background, **BDCP, NNMDA and InterCEDD** in collaboration with stakeholders nationally and internationally, now organize **HerbFEST** as a biennial natural products expo, to help stimulate the natural products and bio-business industrial sub-sector in Nigeria and the ECOWAS sub-region, and to enhance its capacity for delivery of new health foods to the EU, US and Asian market under the Africa Growth and Opportunity Act (AGOA), and diversify the export base of the local economy.





# World and Economic Trends



- Worldwide; Herbal medicine is gaining prominence especially in view of:
  - New or resistant and challenging ailments which orthodox medicine has not been able to address.
  - The total care approach of Traditional Medicine.
  - Easy Access
  - Ready Availability, Cost Effectiveness
  - More Personal and Holistic Approach
  - Apparent Lack of/Minimal Side Effects





# Economic Potentials

Huge source of job and wealth creation



- **Estimated Annual Global trade about \$100Billion**

- Annual Growth Rate 12 -15%
- India and China \$2b - \$5b Annually
- Germany \$1.2b Annually
- Rose Periwinkle \$100million *Endemic to Madagascar and common in the Tropics*
- Currently **Estimated 50,000 – 70,000** species are used worldwide for Medicinal purposes
- About **3,000 species** of Medicinal plants are known in International Trade
- About **20% of the Worlds Flora used for Medicinal purposes constituting the biggest spectrum of biodiversity used by people for a single purpose**
- **50% of prescription drugs are based on one or more molecules that occur naturally in Plants**
- **About 25% of modern Drugs are derived or modeled from identified plant molecules**
- **ONLY 15% of Total prescription drugs are available and consumed in Africa**
- Chinese Traditional Medicine TCM is 80% Plant based
- Ayurvedic Medicine based on about 2,000 plant species and 5,000 years old

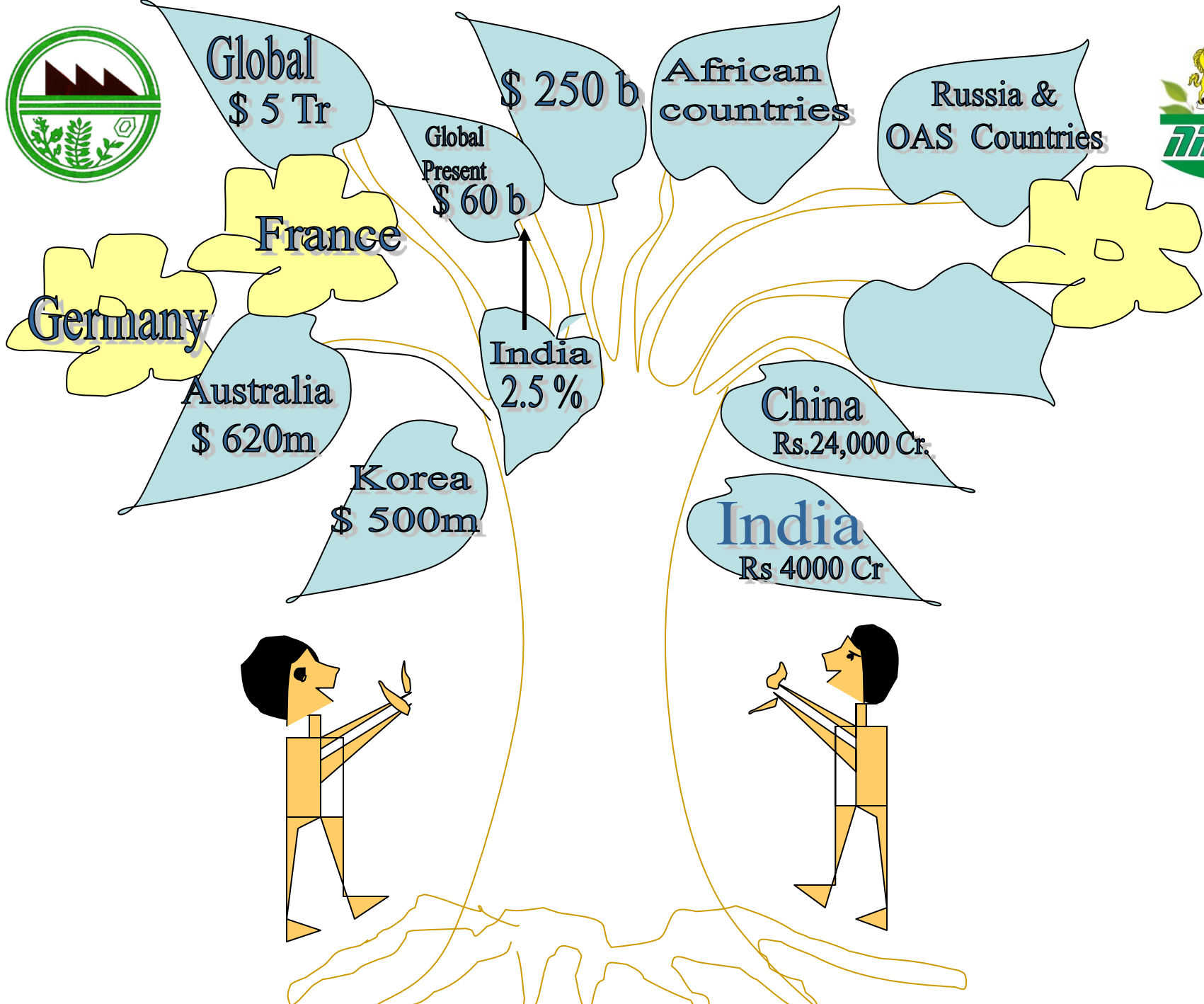


# Economic Trends



- China Trades in 5000 species and 700,000tons
- India Trades in 7000 species
- Sales double in China over the past 5 years
- Sales triple in India in the past 5 years
- Sales grow over 25% in Europe in 5 Years
- Morocco Exports 58.7 Metric Tons







# HerbFEST Goal



The overall goal of the project is to enhance the productive capacity and income status of small producers to enable them exploit the vast opportunities of our natural/ indigenous resources and knowledge.

- This will be achieved through a combination of exhibition and **market promotion, enterprise development and training session.**
- An estimated **100 small and medium enterprises** involved in the manufacture of natural products will exhibit their products to potential buyers, retailers, wholesalers and distributors over a three-day period, in Abuja, Nigeria.
- About **400** participants are expected at the workshop.
- **This year's event is designed to also involve scientific session for abstract presentation by researchers working in the herbs, health food and natural products fields.**
- A number of **financial institutions** were invited to sell their products to numerous herbal producers for possible business development and loan accessibility.
- **The focus is on small and medium enterprises who are seeking marketing opportunities, partners and/or funding**
- **There will be opportunity for them to showcase and exhibit their breakthrough in natural products, Industry focus is on companies with products and technologies**



# Aspects



- A) Exhibition/ Expo
- B) Symposium/ Conference
- C) Training
- D) Abstract/ Poster Session
- E) Product Profile





# Exhibition/ Expo

The focus of the expo is on small and medium enterprises who are seeking marketing opportunities, partners and/or funding.



The focus is on companies /entrepreneurs with products and technologies in any of the following fields:

- **HERBAL MEDICINES/REMEDIES AND MEDICINAL & AROMATIC PLANTS PRODUCTS:** traditional medicines, whole plants, extracts, tinctures, etc
- **HEALTH, COSMETICS AND BEAUTY PRODUCTS:** Natural toothpaste, Soaps, Dyes, Hair, beauty & skin care products
- **HEALTH FOODS AND FOOD INGREDIENTS:** Fruits, nuts, coloring and flavoring materials; Fruit drinks/juices; health snacks; Spices
- **VEGETABLE SAPS AND EXTRACTS:** Sheabutter; Lacs; natural gums, resins, gum-resins and balsams; Honey, Peanut, Coconut, Palm kernel oil (not chemically modified); Vegetable and Animal Fats and Oils; Waxes; Cocoa butter, fat and oil; Colouring matter of vegetable or animal origin
- **BIOTECHNOLOGY AND TECHNOLOGY INNOVATIONS**
- **DOCUMENTATIONS: Books, Journals, etc**
- **EQUIPMENTS, FABRICATIONS AND SERVICES**



# Symposium/ Conference



With the theme “**The Development of Novel Natural Products as Dietary Supplements, Phytomedicine and Nutraceuticals**”, the Symposium will also feature the following:

*Herbal Dietary Supplement*

*BioBusiness (including Bio-Entrepreneurship and Investments)*

*Panel Discussion*

*Medicinal, Aromatic & Pesticidal Plants Research & Development*

*Regulations and Standardization*

*Clinical Evaluation of Herbal Medicines*

*Products' Profile*

The **Bio-entrepreneurship** section will address the numerous challenges posed in the course of getting products out into the markets and overcoming the risks involved in starting bio-businesses

The **Bio-Business** section will address the evolving business planning needs of beginning and experienced rural entrepreneurs

The **Investment** session will feature renowned financial institutions such as CBN, Micro-finance banks, bank of Industry, Commercial banks and Local/Foreign Investors





# Training



Training Theme: “Development and Commercialization of Medicinal and Aromatic Plants”

Training topics include:

- Practical Steps to the Development of Novel Natural Products as Dietary Supplements, Phytomedicines & Nutraceuticals
- Standard and Monographs for the Establishment of Efficacy and Safety of Herbal Medicines
- Certification of Medicinal and Aromatic Plants: Special Reference to Organics
- Commercialization of Research Based products
- Standardization & Quality Assurance of Herbal medicine Products.



# Scientific Session / Abstracts

*(This is part of what's new in HerbFEST 2013)*



Of course we've got Abstracts that are research-focused, clinical-focused, and program-focused On:

- Herbal Products
- Biobusiness, Bioentrepreneurship and Social Innovation
- Medicinal (Aromatic, Pesticidal or Ornamental) Plants Research & Development
- Regulations and Standardization
- Scientific and Medical Laboratory-Based Research
- Clinical Research
- Intellectual Property Rights/Access and Benefit sharing
- Advocacy and Health Policy
- Community Health and Development
- Education or Awareness
- NGOs and Community-Based Programs
- Training or Capacity Building
- Natural Products Trade-Investment, Marketing or Export Promotion
- Public Health
- Environmental Health



# Product Profiles



- Companies are invited to sponsor this session
- A good number have indicated interest.
- 5 – 30 minutes will be given to each to use in promoting and showcasing their products and services



*InterCEDD*



# Expected Project Outputs



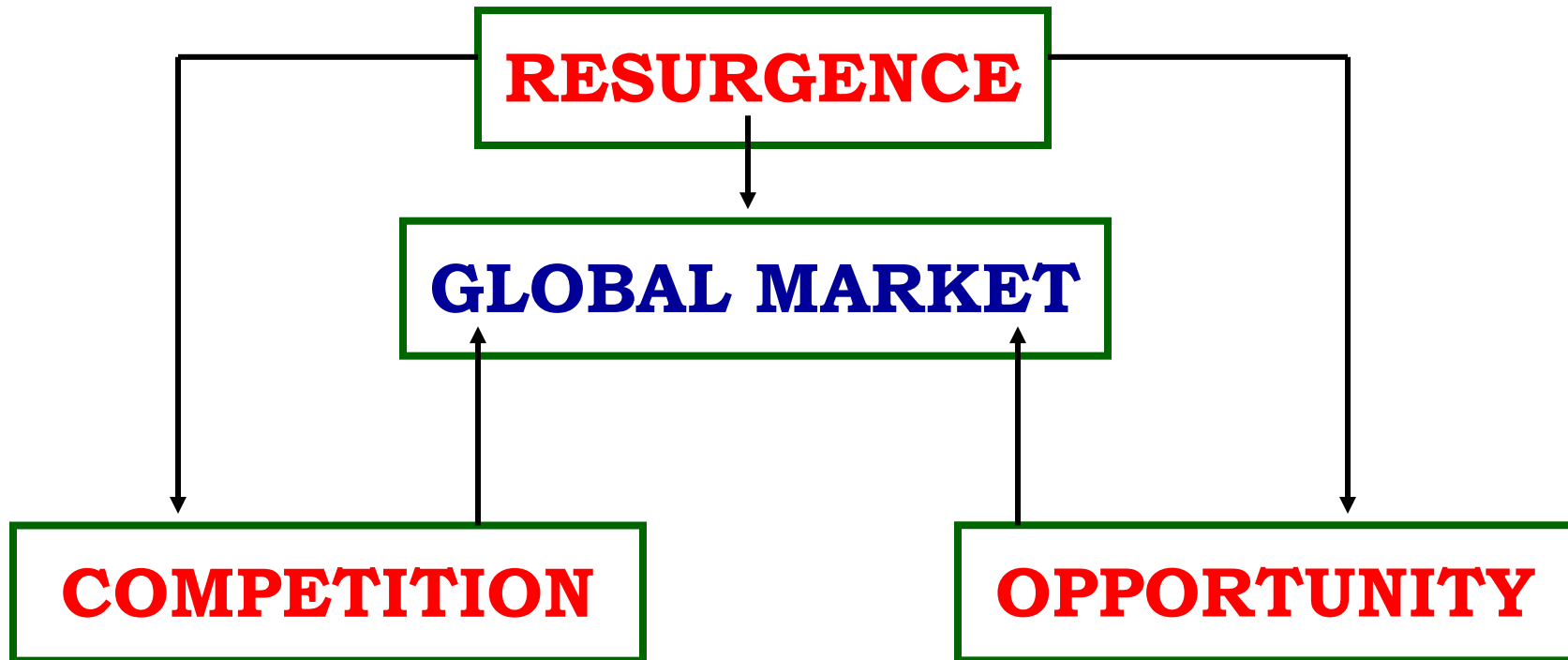
- New herbal, health food & natural products to be introduced to the market.
- Long term framework for a continuous biennial natural products expo in the sub-region.
- Equitable bio-partnerships between and among West African natural products companies, entrepreneurs as well as financing organizations to be developed.
- Research results to be sold to manufacturers and pharmaceutical companies for production.
- New industries established & New businesses financed.
- Project document on broad strategies for development of a biodiversity business sector in the sub-region, developed.
- Database containing profiles of natural products companies in the sub-region, developed.



# Improved Market Opportunities



## HERBAL DRUGS ~ BUSINESS CREATION



We hope to Identify and promote market-based incentives ; Encourage formation of cooperatives; Attract investors etc



# FUTURE ACTIVITIES



- This project will help to lay groundwork for the establishment of an annual natural products expo in the ECOWAS sub-region, and later in the rest of the continent, along the lines of the United States Expo, East/West and the Rothamsted International BioMarket.
- Upon its successful conclusion, partners hope to:
  - **(1) conduct further natural product expos, incorporating not just West African companies and products but also companies and products from Europe, Asia and the United States;**
  - **(2) leverage from data collected at the expo to develop profiles and incentive structures for promoting the emergence of a viable business sector; and**
  - **(3) advance the findings and recommendations on bio-business development to ongoing policy discussions on appropriate regulatory framework for this sector.**



# Need for Collaboration



Support Required for **HerbFEST** could be

- Technical Support
- Financial Support

» **Who?**

- All companies, institutions or persons involved in natural products' promotion, business development, standardization and regulation, safe utilization, research and development.





# Report from HerbFEST 2009



- **BDCP, NNMDA, InterCEDD**, and a host of other collaborators held the HerbFEST 2009 from the 24<sup>th</sup>-26<sup>th</sup> of February 2009, at the Shehu Musa Yar'Adua Centre, Abuja, Nigeria.
- HerbFEST 2009 featured a two-day exhibition alongside a three-day symposium on “**BioBusiness Development & Incentives for Herbal and Natural Products**”.
- The **overall goal of the project** which was to enhance the productive capacity and income status of small producers was achieved through a two-day **Exhibition** and a three-day **Biobusiness Symposium**.
- **Participants in the symposium were about 200 and included Industrialists, researchers/academia, government, investors, financial bodies, orthodox and herbal medicine practitioners and other relevant stakeholders.**
- In addition, there were 13 media representatives at the opening ceremony with a few representatives staying till the end of the programme.
- **A total number of 35 small and medium enterprises involved in the manufacture of natural products exhibited their products on the first two days to an estimated audience of 1500 buyers, investors, retailers, wholesalers and distributors.**
- Additional exhibitors from collaborating agencies were also present.





# Report from HerbFEST 2011



- HerbFEST 2011 featured a BioBusiness workshop with the theme ***“Investment Opportunities for Herbal Food and Natural Products”*** from October 11<sup>th</sup> – 13<sup>th</sup>, 2011 at the Lagos Airport Hotel, Ikeja, Lagos.
- It was aimed at:
  - Identifying new investment opportunities in herbal and natural products
  - Identifying incentives for developing natural products business
  - Highlighting regional and international regulations and standards for herbal and natural products
  - Highlighting the use of science and technology for biobusiness
  - Highlighting intellectual property rights issues
  - Identifying possible New/Innovative Natural products from Africa
- **Participants in the symposium were about 200 and included Industrialists, researchers/academia, government, investors, financial bodies, orthodox and herbal medicine practitioners and other relevant stakeholders.**
- **There were about 25 media representatives at the opening ceremony with a few representatives staying till the end of the programme.**
- **Exhibitors from small and medium enterprises involved in the manufacture of natural products exhibited their products on the first two days to an estimated audience of 2500 buyers, investors, retailers, wholesalers and distributors.**



# HerbFEST 2011



- Additional exhibitors from collaborating agencies were also present.
- About 100 participants were trained on different areas that would promote Bio-Business and standardization of bio-products
- The participants present recommended that:
  - Nigerian entrepreneurs should explore the investment opportunities and incentives in the herbal and natural products business attract foreign exchange earnings from this rich global market
  - Training and capacity building for BioBusiness entrepreneurs in IPR issues and patent acquisition should be strengthened for bio-products developers and innovators to derive maximum benefits from their innovations
  - Strengthened capacity for the standardised production of novel effective phytomedicines for the treatment of Malaria, HIV/AIDS, Tuberculosis etc., utilizing the abundant Traditional medicine Knowledge (TMK) and bioresources
  - NNMDA, NAFDAC, NIPRD, NANTMP and other relevant stakeholders should organize training and capacity building programmes for TMPs to meet NAFDAC and other approved standards.....to mention a few

***It was a successful conference, about 300 national and international participants drawn from the Academia, Governmental Agencies, traditional medicine practitioners, manufacturers of herbal products, exhibitors and the general public were in attendance.***



InterCEDD







# Project Outputs from Previous Events



- The participants unanimously commended the project and organizers.
- They were pleased that:
  - it brought together Government and Private
  - its was very orderly and well organized
  - hard and electronic copies of all presentations were given to all participants
  - Certificates were also issued to the trainees
  - there was an impressive number of collaborators (InterCEDD, PROMETRA, NARICT, SMEDAN, NEPC, NBTI, NIPRD, RMRDC, NABDA and NOTAP) and all agencies participated actively with most of their Chiefs Executives participating personally
  - the resource persons were very informed and captured the very essence of each of their topics.



# Project Deliverables



- **HerbFEST has helped provide an integrated approach towards the commercial utilization and sustainable development of medicinal and aromatic plants in Africa.**
- **HerbFEST has also helped stimulate investment, research and development in biological resources**
- **The communiqué helped develop a project document on broad strategies for development of a biodiversity business sector in the sub-region.**
- **It was able to create an enabling environment for participants/attendees to meet and form networks with investors, buyers, partners, and herbal products manufacturers.**
- **The exhibitors were able to showcase their new products and expand their consumer-base.**
- **The event assisted bridge the gap between Government and Natural Products Manufacturers and other Stakeholders.**
- **The investment session was very productive as it led to the immediate award of two projects by the DG of RMRDC who requested for two proposals from the NANTMP members for funding. (These proposals are to be selected by NNMDA and BDCP).**
- **A database containing profiles of natural products companies in Nigeria is being developed.**
- **Certificates awarded to all exhibitors and participants. In addition, awards were given to the Best Exhibitor, as well as to NNMDA and Quincy Ayodele for their unflinching support and active role played in organizing the event.**



# Conclusion



- With your participation, this programme will go a long way in developing this critical sector for increased diversification of the Nigerian economy.
- We continue to count on the support and encouragement of all our collective Challenge, effort and responsibility in developing and promoting our vast bio-resources, indigenous knowledge, science and technology, our life, our heritage and our hope for a healthier, wealthier future.





**Thank you.**