

INDONESIAN EXPERIENCE

**DEVELOPMENT OF
ORGANIC BIOFERTILIZER
PRODUCTION SYSTEM**

BY

A. TOHAWI HUSNULAH
INDONESIA

RATIONAL

- FARMING NEED FERTILIZER
- ORGANIC FERTILIZER HAVE SEVERAL ADVANTAGES
- TROPIC AGRICULTURAL NEED TO ADD ORGANIC MATTER
- LACK & EXPENSIVE OF ANORGANIC FERTILIZER
- ORGANIC BIOFERTILIZER PRODUCTION IS SIMPLE BUT NOT EASY
- NET WORKING

CONCEPT

- PROSEDURE OPERATIONAL SYSTEM OF RAW MATERIAL , EQUIPMENT & MACHINE ...THROUGH TRAINING & APPRENTICE SHOULD BE GET QUANTITY & QUALITY ORGANIC BIO FERTILIZER BY FARMER'S GROUP PRODUCTION
- ENCOURAGED FARMER'S GROUP WHICH PRODUCED ORGANIC BIOFERTILIZER FOR THEIR COMMUNITY

OBJECTIVE

- FARMER TO FARMER TRAINING & APPRENTICE OF ORGANIC BIOFERTILIZER (OBF) PRODUCTION SYSTEM
- ENCOURAGED (OBF) SMALL INDUSTRIAL ON SKILLED FARMER'S GROUP
- INCOME GENERATING , INDEPENDENCY & STRENGTHEN FARMER'S GROUP
- PROMOTING LEIA (LOW EXTERNAL INPUT AGRICULTURAL) CONCEPT
- NET WORKING

DEMENSION

- **MASS**
GOVERNMENT , NGO's (ARFTC) ,
UNIVERSITY , FARMER'S GROUP
- **LENGTH**
EAST JAVA PROVINCE – INDONESIA
- **TIME**
2003 - 2004

CONTENT

- **MAN**

- GOVERNMENT = 2 PERSONS
- NGO's (ARFTC) = 4 PERSONS
- UNIVERSITY = 6 PERSONS
- FARMER'S GROUP = 252 PERSONS

- **MONEY**

115,000 \$

MATERIAL

- RAW MATERIALS (ORGANIC MATTER)
- DECOMPOSER
- ENERGY
- NUTRIENT

METHODE

- TRAINING
- APRENTICE
- SELF PRODUCTION

MACHINE

- FLEXY HAMMER MILL
- SIEVE

MARKET

- FARMER
- FARMER'S GROUP
- PROJECT

FOR (500 - 700) HA

ACCOUNTABILITY PERFORMANCE

- **INPUTS**

- FOUNDRING , RAW MATERIALS ,
DECOMPOSER , EQUIPMENT &
MACHINE

- TRAINING , APRENTICE , SELF
PRODUCTION

PROCESSES

- TRAINING
- APRENTICE
- SELF PRODUCTION

OUT PUTS

- EX TRENE
- QUALITY PRODUCT
- ECONOMICAL SCALE
- FARMER'S GROUP PRODUCTION

OUT COMES

- SKILLED HUMAN RESOURCES
- QUALITY PRODUCTS
- ECONOMICAL SCALE
- FARMER'S GROUP PRODUCTION

BENEFITS

- TRANSFER OF TECHNOLOGY
- STANDARD QUALITY PRODUCT
- AGRIBUSINESS DEVELOPMENT
- STRATEGIC FARMER'S GROUP PRODUCTION

IMPACT

- BETTER FARMING
- BETTER FARMER'S INDEPENDENCE
- BETTER BUSSINES
- BETTER PRODUCTION
- BETTER LIVING
- BETTER FARMER'S COMMUNITY
- BETTER ENVIRONMENT

TARGET

QUANTITY

- USEFULL UNIT OF EQUIPMENT & MACHINE
- 12 FARMER'S GROUP SKILLED
- 1,200 TON ORGANIC BIOFERTILIZER
AS A FARMER'S WORKING CAPITAL

QUALITY

- QUALIFIED PRODUCT
- SKILLED EX TRENE
- BETTER FARMING
- LEIA (LOW EXTERNAL INPUT AGRICULTURAL)
- EXIST & PROSPEROUS

STATEMENT

- ORGANIC BIOFERTILIZER ... YES !!!
- GO ORGANIC 2010
- DYNAMIC CONCEPT
- THE SOIL IS MOTHER OF PLANT
- LEIA ... WISE !!!

ATT&T ISSUE

- TECHNOLOGY OF MACHINERY
MASSPRODUCTION ORGANIC
BIOFERTILIZER
- TRANSFER KNOWLEDGE THROUGH
TRAINING & APPRENTICE
- NET WORKING
- EXIST & PROSPEROUS

CONCLUSION

- WELL OPERATED
- POLITICAL WILL ATTACHMENT
- TAKE CARE & TO DEVELOPT
- NET WORKING
- NOW , AGAIN & SUSTAINABLE
- EXIST & PROSPEROUS

I INTRODUCTION P4S

by : Mr. A. Tohawi H.SH
chairmen of farmer agricultural and rural - training centre (FAR-TC)

APA ITU P4S ?

Pusat pelatihan pertanian dan pedesaan swadaya adalah suatu lembaga yang dimiliki dan dikelola oleh petani baik secara perorangan atau kelompok, yang mempunyai kegiatan usaha yang maju dan mempunyai rasa peduli untuk berbagi di sesama petani dan pihak yang berkaitan dengan pertanian, sehingga di dalam kegiatan berbaginya terkandung ada proses pembelajaran / pentransperan ilmu dan pengalaman yang didasari sifat tanpa pamrih.

APA SAJA AKTIFITAS P4S?

Melaksanakan kegiatan usaha pertanian reel, dari mulai aspek hulu sampai dengan hilir, sesuai dengan unggulan usaha masing-masing P4S baik yang bergerak di on farm maupun di of farm.

DIMANA SAJA P4S ITU BERADA?

P4S tersebar di seluruh propinsi di Indonesia, dengan berbagai klasifikasinya (**pemula, lanjut, madya dan utama**) dengan ciri khas masing-masing pengelolaan.

ADA BERAPA P4S DI INDONESIA ?

Jumlah yang terdaftar di forum komunikasi p4s ada **330** yang tersebar di Kabupaten/Kota dan 30 propinsi.

PEMANFAATAN KOMPUTER DAN INTERNET DI P4S

Pemanfaatan komputer dan internet oleh petani Indonesia masih sangat rendah, belum ada data yang pasti berapa persen petani / pengusaha pertanian Indonesia yang sudah memanfaatkan komputer dan internet.

Ada beberapa pengelola P4S yang sudah memiliki komputer dan memanfaatkan internet namun belum maksimal, diantaranya dimanfaatkan untuk :

- Pembukuan usaha tani
- Pengadministrasian kegiatan
- Mencari literature
- Surat menyurat (e-mail)
- Data base P4S
- Alamat website P4S : www.p4s.com

Pengelola P4S memiliki pengetahuan dan mampu mengoperasikan komputer dan internet didapat dari kreativitas masing-masing, didorong rasa ingin tahu dan merasa benar-benar membutuhkan, belum adanya partisipasi penyuluh pertanian lapangan yang sehari-hari sebagai mitra petani dilapangan.

Salah satu lembaga swasta yang pernah mendorong peningkatan pengetahuan para pengelola P4S untuk mampu mengoperasikan komputer dan internet adalah Microsoft Indonesia, ada beberapa petani pengelola P4S yang sudah dilatih dan dibekali pengetahuan tentang betapa manfaatnya komputer dan internet untuk menunjang kegiatan usaha tani.

AKTIFITAS PUSAT PELATIHAN PERTANIAN DAN PEDESAAN SWADAYA (P4S)



Penyuluhan perkoperasian di P4S



Pelatihan budidaya ikan air tawar di P4S KOPSES



Pengurus Forum Komunikasi P4S sedang menjelaskan program-program kegiatan kepada para pengelola P4S

BAGAIMANA UNTUK MENUNJANG PENGEMBANGAN P4S KE DEPAN.?

Untuk menunjang berkembangnya P4S-P4S, perlu adanya sarana dan prasarana yang lebih lengkap, baik yang berkaitan dengan pengembangan usaha pengelolanya maupun alat untuk melengkapi sarana proses pembelajaran, dan yang paling diperlukan untuk hal itu adalah kelancaran proses teknologi informasi yang belum dimiliki oleh setiap P4S serta penguatan kelembagaannya.

Kelembagaan P4S di tingkat nasional sudah mempunyai akses internet, namun demikian fasilitas tersebut belum dapat digunakan secara maksimum, dikarenakan diantara para pengelola P4S belum semuanya mempunyai akses internet/fasilitas IT yang memadai.

Untuk menjangkau seluruh P4S yang tersebar di setiap peloksok di tiap kabupaten/kota, sudah merupakan keharusan tersedianya fasilitas IT, untuk mempermudah pengkoordinasian secara kelembagaan yang pada gilirannya akan mempercepat segala aspek kegiatan usaha .

II

SEJAUH MANA P4S MENGGUNAKAN TEKNOLOGI INFORMASI

?

a. idealnya :

- sebagai alat komunikasi antar p4s
- sebagai akses informasi ke berbagai pihak
- peningkatan bisnis/ peningkatan pendapatan
- peningkatan kepercayaan
- untuk meningkatkan pelayanan
-

b. syarat-syarat

- sarana prasarana dasar ; listrik.telpon
- peralatan lunak / soft ware
- sumber daya manusia
- biaya operasional
-

c. kondisi sekarang

- yang sudah terjangkau listrik 97%
- listrik dan telepon 80%, yang punya computer 75%, yang sudah mempunyai akses internet 0.5%, yang sudah mempunyai ID internet 0.2.%

- kelembagaan FK P4S sudah di lengkapi dengan fasilitas internet dengan ID www.p4s.com

d. masalah

- ada yang belum terjangkau listrik sebab kondisi lokasi nya jauh dari jangkauan PLN langkahnya.....
- ada listrik tapi telepon belum terpasang sebab jaringan telepon.... langkah.....
- Ada listrik, telepon tetapi tidak ada computer sebab piranti computer sapa saat ini masih merupakan alat yang mahal dan pemakaiannya memerlukan ilmu pengetahuan yang khusus, dimana petani belum semuanya dapat mengg unakan langkah.....
- ada listrik,telepon, computer, tapi belum terpasang pasilitas internet.,sebab.....langkahnya.....
- Ada semua di point atas, tapi belum punya ID
- Semuanya ada tapi biaya operasional
- **Perencanaan ke depan. Periode 3 tahun ke depan (2006-2009)**

No	Program	Kegiatan	Tahapan	Komponen	Biaya	Waktu	Lokasi	Penanggung jawab

Catatan:

- Pusat pelatihan pertanian dan pedesaan swadaya (P4S) pernah mencoba memasukan data produk ke dalam internet, tetapi permintaan pasar tidak sesuai dengan yang ditawarkan.
- kelompok kontak tani nelayan andalan KTNA sebagai induk organisai dari FK P4S telah melaksanakan **sms centre** dengan nomor, yang menjadi masalah adalah, perlu adanya 1.000.000 nomor handphone yang terdaftar, artinya biaya untuk membuat jaringan IT ini, masih mahal.
- hubungan dengan materi pertemuan ini :
Pusat pelatihan pertanian dan pedesaan (P4S) ada 330 yang terdaftar, tapi tersebar diseluruh pelosok , kami dari pengurus FK P4S, merasa berat jika menyebarkan informasi, kaitan dengan kegiatan ini, apa yang harus segera disiapkan oleh FK P4S untuk dapat menindaklanjuti,paca **WORKSHOP ON UTILIZATION OF THE ATT&T NET WORKING** ini.

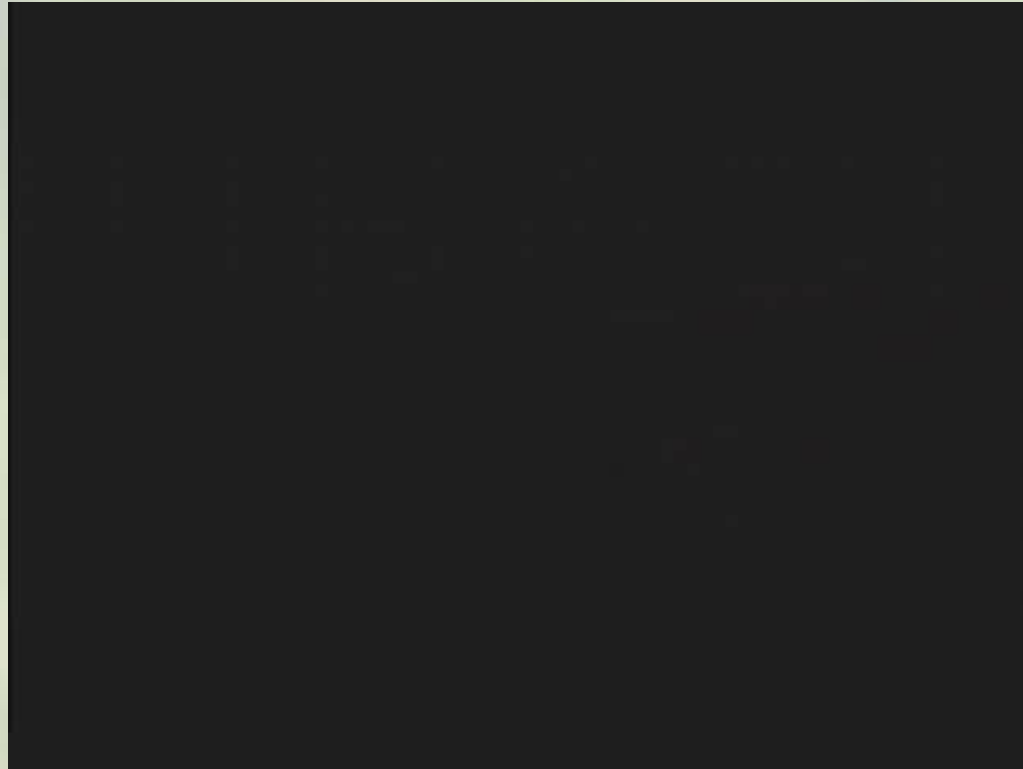
Role of Technology to Improve Farmer's Capacity

Cynthia Iskandar
PT Microsoft Indonesia

Experience of Farmers' group from Bali

- Access information about new commodity
- Searching opportunity through internet
- Create connection with buyer through email
- Shorten distribution line
- Not depends on the middle man

VIDEO



SHARING SESSION

I WAYAN KANTEN

Leader of Farmers' Group in Pancasari - Bali

The image features a close-up, shallow depth-of-field photograph of rice stalks with golden-brown grains. The background is a soft, out-of-focus green. A horizontal white band is overlaid across the middle of the image, containing the Microsoft logo and slogan. There are also solid yellow rectangular blocks in the top-left and bottom-right corners.

Microsoft
Your potential. Our passion.™

ACTIVE APPLICATION OF INFORMATION NETWORKS, PRESENT AND FUTURE PROSPECT

Toshiro Takatsuka, Takatsuka Farm

INTRODUCTION

Currently, 61.2 % of Japanese farmers are using personal computers and 69 % of them are the customers of the Internet (Ministry of Agriculture, Fisheries, and Forestry, Japan, hereafter MAFF, 2005). Although the reasons why they buy the personal computers are various, the majority start to use after they participate in “training courses for book-keeping for ‘blue return’ or self-reporting tax return”. These courses are organized by agricultural extension offices and Japan Agricultural cooperatives, (hereafter JA), in different regions. But except for the bookkeeping, farmers who are using personal computers mainly for the purpose of farm management are still limited.

I would like to present here, therefore, my own farm management as a case study in relation to the application of information networks. My presentation consists of four parts, (1) reason and timing for purchasing personal computers, and how I use them in my current farm management, (2) types of information networks I use, and how I use them, (3) present status and the problems, which are based on my experiences as a board operator to facilitate information communication in “AZEMICHI Network, where AZE means dykes of rice field and MICHI means road in Japanese, which is provided by Japan Agricultural Development & Extension Association, (here after JADEA), and (4) future possibilities of the development and application of the information network will be discussed and/or proposed.

GENERAL OUTLINE OF TAKATSUKA FARM

(1) Outline

As shown in Table 1, although the rice cultivation is the core with 9.7ha, the farm is diversified in its management to include fruits, 1.3ha, vegetables, 1.0ha, and food-processing factories.

Table 1: The outline of Takatsuka Farms

Size of Fruit-growing area		Rice	Food Processing Factories	Vegetable	Total
Persimmon	Japanese Pears				
115a	15a	970a	54 m ²	100a	1,200a

(2) Human Resources

Family members: my wife, father, my mother and myself

Part time labor: three persons for ten days for bud treatment and one person for

Harvesting in the
Persimmon production

(3) Major machineries and facilities

For efficient operations and cost cutting, workhouse and big machineries such as combine harvester and tractor are jointly owned by 8 families, which are organized as an agricultural production union. Major rice-growing activities in spring and harvesting in autumn are collaborated by the 8 families. The same members are operating and managing a rice-milling center under JA.

PRESENT STATUS OF THE APPLICATION OF INFORMATION NETWORKS

(1) Introduction of Personal Computer

I started to use computer when I was a university student in 1989. Later I used computers to prepare various documents for a company I worked in Tokyo. The company organized internal and external training courses for the staffs often, which made my computer skills improve. In 1997 I myself bought a computer for personal use apart from the company business use. In 1999 I left the company and returned to my hometown, Niigata, to do farming with my parents. At that time we had two computers for myself and for my wife. We bought a third computer in 2003 and fourth in 2005 to replace the two old computers. Now we have three computers, one of which is used as a toy for our child.

(2) The Chronological table of the application of Information Networks (see table 2)

Table 2: The Chronological table of the application of Information Networks

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Use of the Internet										→
Open of Home Page				→						→
Participation of AZEMICHI network				→						→
Use of Mailing List				→						→
Open Diary Through "Web log"									→	

a. Use of the Internet

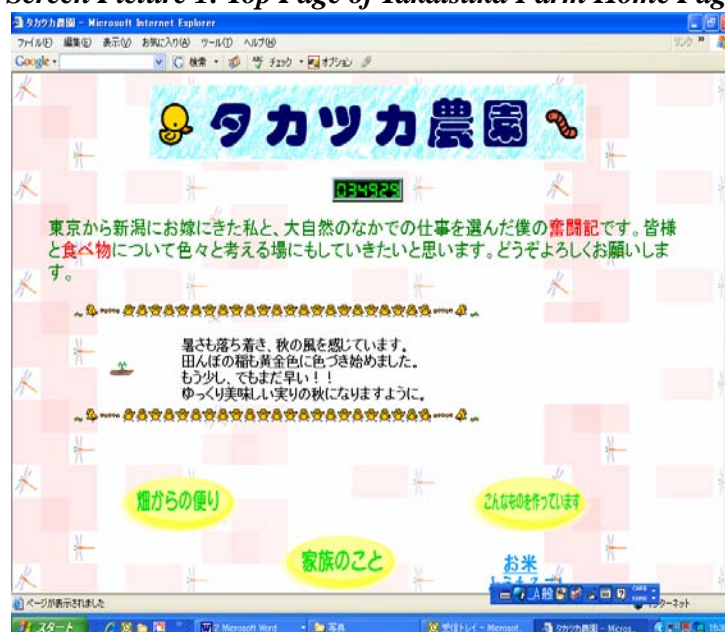
As soon as I purchased personal computer, I started using it for the Internet and e-mail. At the beginning, the Internet was connected through telephone line in a "dialup connection", but with it, the image processing was very slow. Hence, the computer was used mainly for document preparation and e-mailing. Currently, an

ADSL line made the communication speed dramatically higher including image processing. Search engines, such as “Google“ and “Yahoo“, have also developed extensively, thus, the Internet is now mostly used for acquisition of necessary information.

b. Opening of Home Page

In 1999 my wife opened the home page of our farm by self-support efforts using reference book. (see screen picture 1) Major aim was not increase the selling farm products, but to expand the communication with people all over Japan. Currently we are selling farm products on requests to people who had started communication through the homepage. But the renewal of the homepage, which my wife has been working on, has now become a little too burdensome.

Screen Picture 1: Top Page of Takatsuka Farm Home Page



c. Participation in AZEMICHI network

The AZEMICHI network has been in operation since 1998, which was started at first by JADEA through a four year funding by MAFF. The AZEMICHI network is still being continued currently. A major object of this network is to facilitate communication in national scale among people in different local networks in prefectures and extension offices. Although members are exclusive, no user fee is required. This is the information network among the farmers and one of its major services is an e-mail conference.

After the home page of Takatsuka Farm was opened, I have participated in an introductory training course of the local network (see Photo 1) through the invitation by the local extension center. Senior farmers had also participated as advisors, who encouraged me to become a member as an active local network contributor for KAKIKOMI, to write comments or notes in a free plaza in the network. The local network managed by Niigata prefecture has organized training workshops and a social gathering is held annually. My activities in the local network have expanded day by day through the expansion of the network of people who communicate actively. Active

participation on the network increased to obtain relevant information and expanded communication rings that encouraged us to initiate further activities and pleased us. Now I am a board operator of the free plaza in the AZEMICHI network. Being an operator is not for my duty but for my pleasure.

Photo 1: Introductory Training Course of AZEMICHI network



d. Use of Mailing List

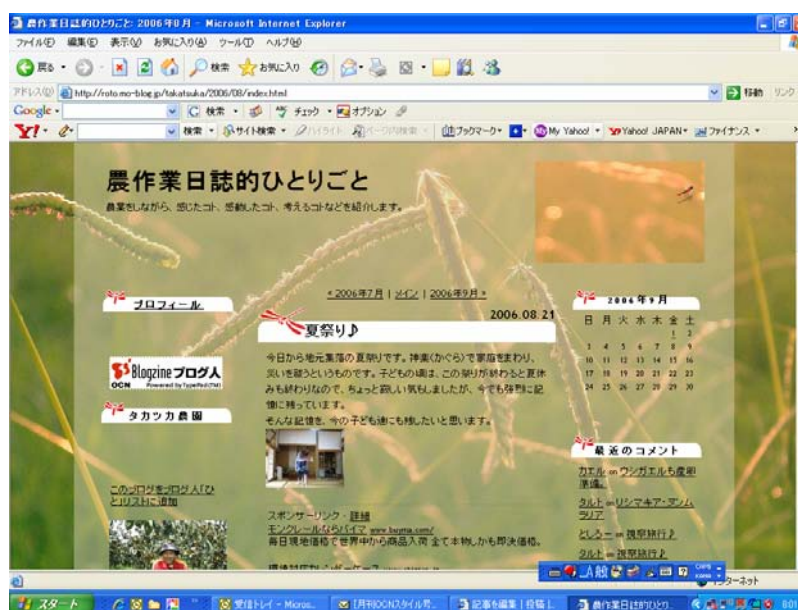
In order to facilitate exchange of information regarding rice growing and agriculture, I have joined a Mailing List, (hereafter ML), of which members are consisted of both rice producers and retailers coming from all over Japan. In the ML, e-mails are sent simultaneously to all the members of an ML. Although all information is not necessarily of direct interests to all the members, there are many opportunities to obtain and share new findings and useful information. Twice a year, members are gathered in Tokyo for direct social interaction. Apart from e-mail communication, direct meeting, discussion, and eat and drink deepen good contact among members, which further activates ML communication.

e. Open Diary through “Web log”

Our home page contains “farming activities ongoing”. But daily or even seasonal renewals require much effort and are tedious. Thus we have started using “Web log”, in which we can describe casually in a diary style specific activities in our farms and personal comments and essays of each day. Renewal of the “Web log” is easy and can be done using not only personal computer but also mobile phone, which make renewal possible even during the busiest season.

The “Web log” is a simple style diary, in which I can disclose my personality directly, as well as my policy on farming to “Web log” readers, i.e., customers (see Screen Picture 2).

Screen Picture 2: Farming diary through “Web log”



(3) Present status and problems of AZEMICHI network

During August of 2006, there were only 16 members who wrote comments or opinions on the free plaza in the network. Although the number of access is increasing, that of active members is not. My proposals to improve this situation are following four, i.e., (1) to give personal ID's to the agricultural extension officers and leading farmers, so as to enable them to write freely on the free plaza even from their own homes, (2) to increase the number of board operators such as I, so as to increase the supply of relevant information, (3) to increase awareness of the presence of the AZEMICHI network, and of the way it can be used in various occasions, utilizing such activities as the training courses on bookkeeping and on personal computer use organized by the agricultural extension offices, and (4) to organize face-to-face meetings (see Photo 2) at least once a year so that members can make more direct personal relationship among them. Information network gives us just opportunities for beginning communications. Hence, without occasions for faces to faces talks, such network communication will diminish with passing time.

Photo 2: Off line meeting at Niigata Prefecture



(4) The approach to facilitate the application of information network

There are many farmers who want to price their products appropriately and sell them. Many farmers, however, tend to stay as exclusively farmers, because they have no experience and knowledge in marketing. They, therefore, don't know how to obtain necessary information to start.

Let's assume that we desire to sell our products on the Internet. For the pricing, we can now search on reasonable price ranges at the sites such as "RAKUTEN", which is the largest Internet shopping mall in Japan (see Screen Picture 3), and many other personal shops. We can get necessary information through our personal home computer on how to price, how to present the merchandise, how to prepare them for the market, and how to make a catch copy on them, and so on. Since those sites announce lists of best sellers, we can also understand the market trend on the favorite products of consumers.

It will be difficult, however, for beginners to log onto the Internet and to make a home page on their own independent efforts easily upon buying personal computers. Thus, the first step will be to encourage farmers to use the personal computer by supplying relevant information services on the Internet by administrators, extension offices and JA. Information supply services by letters and fax, which have been the traditional methods, should be replaced ultimately. It may be necessary to supply step-by-step training on subjects such as e-mail communication, the Internet searching, and the Internet writing. If we train them at first to certain degrees of computer skills, e-learning through e-mail communication will be possible for them. To visit and train at farmers' homes may be necessary sometimes.

Screen Picture 3: Top page of RAKUTEN Home Page



FUTURE PROSPECT OF DEVELOPMENT

I believe that the current farm management needs improvements in three major areas.

The integration or the expansion of farm management from the production to goods marketing will be the first. Traditionally, farmers were just producers exclusively. Farmers have left the marketing activities of all of their products solely to JA and other market mechanisms. This must change. Farmers should manage not only production but also food processing and merchandising.

Farmers will have to try to develop new farm product goods through the linkage with consumers and other business sectors. We can increase the value of new farm goods through the supply of the background concept behind the development of particular products and relevant information on such products to the consumers and markets.

The second point is to widen and deepen personal relationships through communication with other business sectors. Active communication with people in the distribution sector, food manufacturing and processing sector, the food service industry, and ultimately with consumers who enjoy eating farm products are very important.

All of them are our potential customers. Face to face human relationship is the prerequisite to obtaining and delivering useful information.

The third point is the introduction of marketing approach. The marketing is an integrated business method that includes all the facets from production to food processing and retailing under unified policy. The same business model is applied without exception through the distribution sectors, food manufacturing and processing sectors, and the food service industry. The planning of the business models is based on the needs of the consumers.

The ultimate importance is “how to find the customers” who would like to buy farm products, “how to develop customers”, and “how to sustain good human relationship”. “How to attract our farm customers” is really important concept that we must develop.

In order to improve the three points mentioned above, it is imperative to use the tool of personal computers for their active application to information network.

Regrettably at the moment, apart from the bookkeeping, farmers who realize the fact that personal computers are necessary for the improvement of their farm management compose only an overwhelming minority. Using personal computer, however, we can do not only bookkeeping, document and table preparation, but also make fiends in the world through active application of information network. Potential value of these aspects should be stressed with more emphasis. Through expanded communication with many potential friends, we can widen and deepen our points of view. Thus, we can facilitate exchange of useful information and linkages through the use of computers, and we can increase our potential to make higher farm income as well.

ACTIV APPLICATION OF INFORMATION NETWORKS

PRESENT AND FUTURE PROSPECT

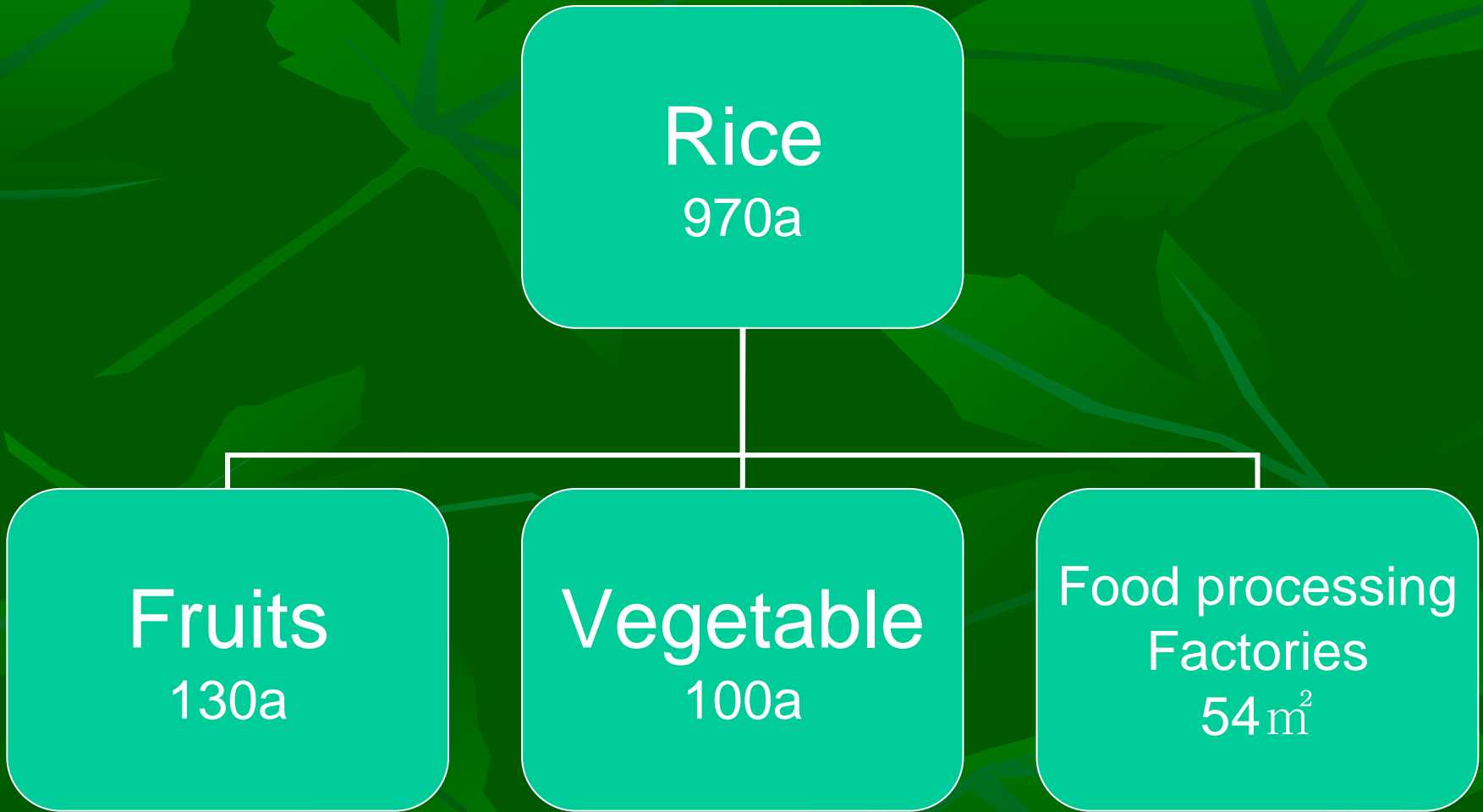
Toshiro Takatsuka

TAKATSUKA FARM

INTRODUCTION

1. General outline of Takatsuka Farm
2. How to use the personal computer
3. Types of information networks I use
4. AZE MICHI Network
5. Future prospect of development

General outline of Takatsuka farm



Rice crop section



Fruits section

Persimon(kaki)



Vegetable section



Food processing section



PRESENT STATUS OF THE APPLICATION OF INFORMATION NETWORKS

1. Introduction of personal computer
2. The chronological table of the application of information networks
3. Present status and problems of AZE MICHI network
4. The approach to facilitate the application of information network

The Chronological table of the application of information Networks

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Use of the Internet										
Open of Home Page										
Participation of AZE MICHI network										
Use of Mailing List										
Open Diary Through "Web log"										

Open of Home Page

タカツカ農園 - Microsoft Internet Explorer

ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

タカツカ農園

035085

東京から新潟にお嫁にきた私と、大自然のなかでの仕事を選んだ僕の奮闘記です。皆様と食べ物について色々考える場にもしていきたいと思います。どうぞよろしくお願ひします。

.....

暑さも落ち着き、秋の風を感じています。
田んぼの稲も黄金色に色づき始めました。
もう少し、でもまだ早い！！
ゆっくり美味しい実りの秋になりますように。

.....

畑がらの便り

こんなものを作っています

家族のこと

お米
とうもろこし

スタート | Microsoft PowerPoint... | 3 Internet Explorer | APEC | 2 Microsoft Word | 0:21

Participation of AZE MICHI network



Farming diary through `Web log`

農作業日誌的ひとりごと: 2006年8月 - Microsoft Internet Explorer

ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

戻る 検索 お気に入り

アドレス http://roto.mo-blog.jp/takatsuka/2006/08/index.html

Google 検索 チェック オプション

Y! 検索 サイト検索 ハイライト ページ内検索 ブックマーク My Yahoo! Yahoo! JAPAN ファイナンス

農作業日誌的ひとりごと

農業をしながら、感じたこと、感動したこと、考えることなどを紹介します。

プロフィール

夏祭り♪ 2006.08.21

今日から地元集落の夏祭りです。神楽(かぐら)で家庭をまわり、炎いを祓うというものです。子どもの頃は、この祭りが終わると夏休みも終わりなので、ちょっと寂しい気もしましたが、今でも強烈に記憶に残っています。そんな記憶を、今の子ども達にも残したいと思います。

タカツカ農園

このブログをブログ人「ひと」リストに追加

スポンサーリンク - 詳細
モンクレールならバイマ www.buyma.com/
毎日現地価格で世界中から商品入荷 全て本物しかも即決価格。

2006年9月

日	月	火	水	木	金	土
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

最近のコメント

カエル on ウシガエルも産卵準備。

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- 2.To increase the number of board operators
- 3.To increase awareness of the presence
- 4.To organize face-to-face meetings

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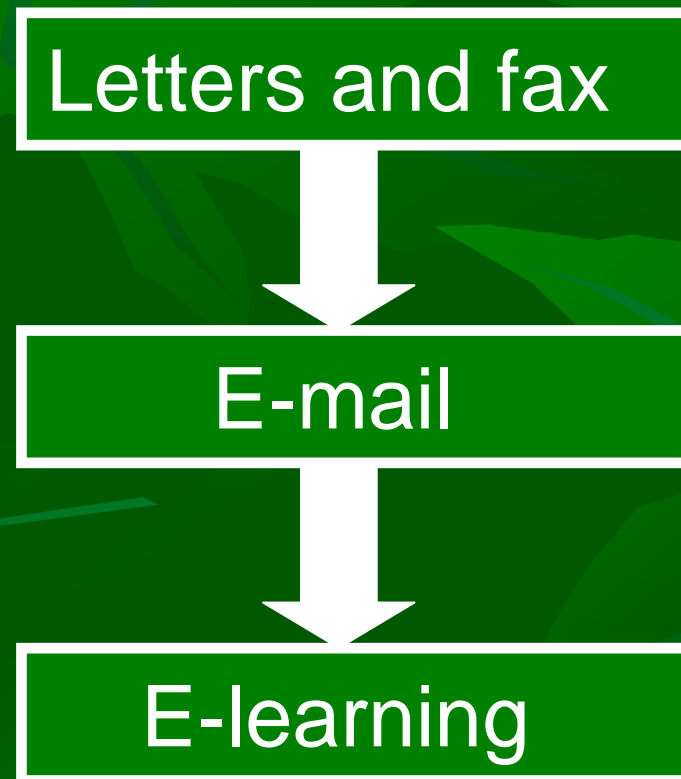
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The approach to facilitate the application of information network



Future prospect of development

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2. To widen and deepen personal relationships through communication with other business sectors
3. The introduction of marketing approach

**It is imperative to use the tool of
personal computers**

**Let's extend connections all over the
world using a personal computer!**

END

Thank you for your attention!

EXPERIENCES ON THE UTILIZATION OF AGRICULTURAL TECHNOLOGY TRANSFER AND TRAINING NETWORKING SYSTEMS IN MALAYSIA¹

Zulkifly Mohd. Zain²

SUMMARY

This paper discusses the measures taken to establish direct linkages and networking systems with the various government agencies entrusted with the extension and the overall development of agriculture. The system involves development, promotion, transfer of technology, training and commercialisation. It focuses on commodities such as tropical fruits, tobacco, rice, livestock and poultry, and entrepreneurship development in the food processing industry. Successful agricultural technology transfer and training mechanisms involving rice and tobacco are highlighted. Farmers and large-scale operators have benefited through implementation of the technology promotion and transfer programme via the extension agencies, and direct commercialization. ICT is being used as enablers in carrying out the programme

¹Paper presented at the Workshop on the Utilization of Agricultural Technology Transfer and Training Networking Systems, September 18-22, 2006, Medan-Indonesia

²Senior Researcher, Malaysian Agricultural Research and Development Institute (MARDI)

INTRODUCTION

Rice and tobacco, being important socio-economic crops, have been subjected to heavy intervention by the government in the market place. In the rice industry, a host of interventions are in place, including monopoly on imports; GMP for paddy; controlled prices at milling; wholesaling and retailing; and fertilizer and price subsidy. In addition, the government also provides drainage and irrigation facilities and undertakes R&D for rice. For tobacco, apart from being protected by high tariffs, the Malaysian tobacco industry also receives other forms of support from the government. The major interventions include licensing of curers and cigarette manufactures and registering of growers, implementing production quotas to balance production with demand, setting proper grading and pricing of green and cured leaves, and control and regulating the marketing of green and cured leaves.

Currently, Malaysia is not competitive in rice and tobacco production. The ratios of wholesale price to world price of these commodities were consistently more than 1. For rice, the average ratio increased from 1.17 for the 1985 -1990 period to 1.51 for the 1991-1996 period, indicating increasing economic efficiencies and decreasing competitiveness (Tengku Mohd Ariff, 1998).

Agricultural technology transfer and extension for farmers in Malaysia have been implemented through various approaches by relevant agencies under the Ministry of Agriculture and Agro-Based Industry (MoA).

The Malaysian Agricultural Research and Development Institute (MARDI) has been entrusted with R&D, promotion and transfer of technology (TOT) while the Department of Agriculture (DOA) is responsible for carrying out extension and regulatory services.

Other agencies are also involved through the MoA Inc. concept whereby the various agencies work together towards achieving a specific goal. This helps to facilitate and enhance the delivery of support services to the farmers, fishermen and private sector enterprises.

An effective agricultural technology promotion, transfer and training programme must be able to increase farmers' productivity. It can be done by offering technology, advice and help to farmers to enable them to analyse and identify problems and opportunities.

This paper discusses the implementation of agricultural technology transfer and training system in Malaysia with special reference to the mechanism for rice and tobacco, in an attempt to increase their production efficiencies and competitiveness in facing the challenges of globalization.

The paper also discusses the status of networking system on these commodity and agriculture in general.

AGRICULTURAL RESEARCH AND DEVELOPMENT

Agricultural research and development with respect to agricultural commodities (except oil palm, rubber and cocoa) and food has been entrusted to MARDI.

MARDI was set up by an Act of Parliament in 1969 to provide technological support for agricultural advancement of the country. Over the last 35 years MARDI has contributed significantly in terms of research and technology development.

With the challenges and demand of ASEAN Free Trade Area (AFTA) and World Trade Organization (WTO), new approaches would be needed to ensure that MARDI continues to be relevant in the country's main thrust and development.

MARDI has since redefined its role to provide the following core functions:

- Generate leading edge technology
- Transfer of technology (TOT) for public good and social economic consideration
- Commercialise technology & intellectual property (IP) for wealth generation
- Technical, scientific and expert service provision
- Leading towards K-economy entrepreneur with a K-intensive human resource development.

Several measures are being undertaken to establish networking systems with the various agencies entrusted with agricultural development. Close links are maintained with the BPM, DOA, FAO, FOs, IADPs, JPS, KADA, MADA and NTB in the form of MoA Inc++. These linkages and networking are very important as these agencies are directly involved with the farmers.

Examples of successful technology transfer mechanisms involving tobacco and rice are herein discussed.

TECHNOLOGY TRANSFER AND TRAINING

Rice – package technology for high yield rice production

Background

Rice is grown on double cropping in the 8 granary areas (MADA, KADA, Kemasin-Semerak, Ketara, Kerian-Sungai Manik, Seberang Perak, PBLIS and Pulau Pinang) with a combined planting acreage of 440,000 ha per year. Small irrigated areas (secondary irrigation areas) contributed 30,000 ha. In addition, rainfed single crop areas, including dryland rice, make up a total acreage of around 150,000 ha (including Sabah and Sarawak). There are 150,000 farmers growing rice with an average farm size of 1 - 2 ha.

About 35% of our rice needs are imported. The government has set a target of 90% self sufficiency by year 2010. Among the problems cited for the failure to achieve self-sufficiency are the prevailing high labour and input costs.

A study on the productivity of the food sector in 2000 (Tunku Mahmud et al., 2002) showed that productivity index for paddy with subsidy was 1.38 and that without subsidy was 1.05. In other words, a ringgit spent on input would only yield a 5 sen return if subsidy was excluded. Rice yields also have not moved from the national average of 4 mt per ha.

Among the problems contributing to the poor yield and high cost include poor control of weeds, inefficient mechanization activities, the use of uncertified seeds, water management, lack of fertilizers and poor adoption of IPM strategies.

Although technology is available from many research findings, in many instances, its adoption rate by individual farmers is still low.

With the adoption of technology and efficient TOT, productivity is expected to improve. Yield in the granary areas is expected to increase from 4.5 mt per ha per crop (2000) to 9.0 mt per ha per crop by 2005 and in the non-granary areas from 3.5 mt per ha per crop to 5.5 mt per ha per crop (Anon, 2003).

In terms of labour input, by 2000, working man-day has fallen from 47 days per ha per crop (1995) to 15 days per ha per crop. All these increases in productivity can be attributed to R&D, the use of mechanization and the system of TOT.

One of the more effective technology transfer examples is that of high yielding rice (HYV) varieties. MARDI has so far released 34 varieties which contributed immensely to the increase in the national rice production (Table 1). Among them are MR 84, MR 167, MR 211, MR 219 and MR 220. The package technology for high yield rice production is available (Alias et al., 2002).

Table 1. Characteristic of Four New Padi Variety Released

Variety	Cross	Maturity (day)	Height (cm)	1000 grain wt (g)	Yield (mt/ha)	Year Released
MR 219	MR 151/MR 137	105-111	76-78	27.11	6.0-10.7	2000
MRQ 50	MRQ34/Khawk Dawk Mali	123-125	65-70	20.42	4.0-5.0	2002
MR 220	MR 151/MR 137	105-113	76-78	29.15	6.8-9.5	2003
MRQ74	MRQ34/KDML/Kasturi///Q34	123-125	60-70	22.86	5.5-6.0	2004

Technologies promoted

- New HYV varieties MR 219 and MR 220
- Direct seeding
- Fertilizer recommendation
- Land preparation
- Efficient water management
- Weed management
- Pest and disease
- Harvesting and post harvest handling

Target groups

- Farmers
- Large scale commercial growers and seed producers
- Extension agents

Methods

- Endorsement of MR 219 and MR 220 varieties by the agency's Scientific Council
- TOT package technology through local verification trials, up-scaling and pilot project (40 ha).

- Distribution of breeder seeds and foundation seeds to implementing agencies.
- Supervision in the production of registered seeds and certified seeds by implementing agencies and seed providers.
- Training of the extension agents through courses, seminars and farm visits.
- Commercialisation involving large scale operator.
- Impact assessment through continuous monitoring.
- Use of ICT in transferring, compiling, sharing information, product and services.

The flow of the TOT processes is shown in Figure 1 while that specific for quality seedling production is shown in Figure 2. The estimated rice yields from a 1.6 ha TWG project with KADA for four seasons (2003 - 2006) have been shown to increase from 4 mt/ha to more than 7 mt/ha. This project also functioned as a demonstration plot for the rest of the 40 ha collective farm.

Figure 1: Linkages among the various sectors of the rice industry

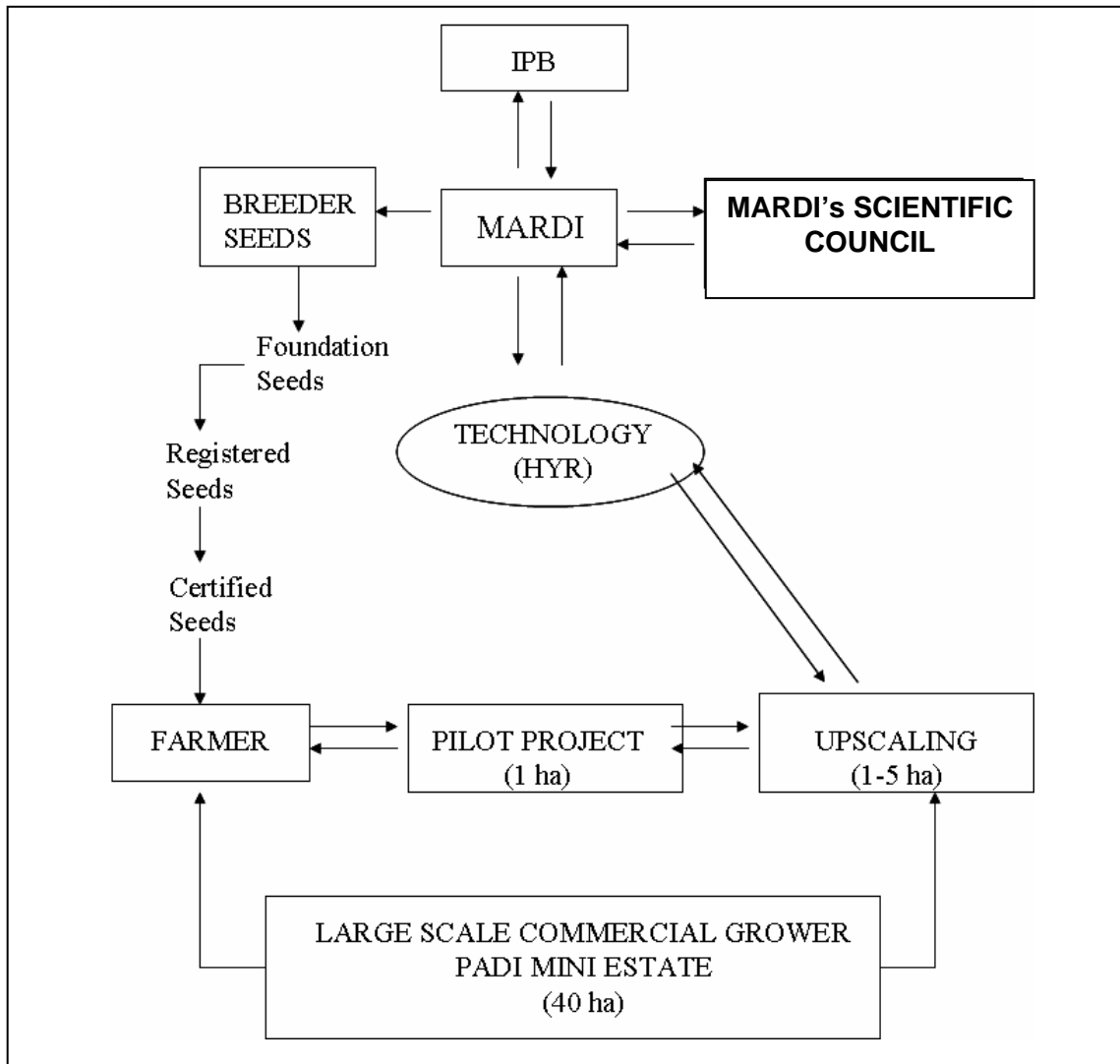
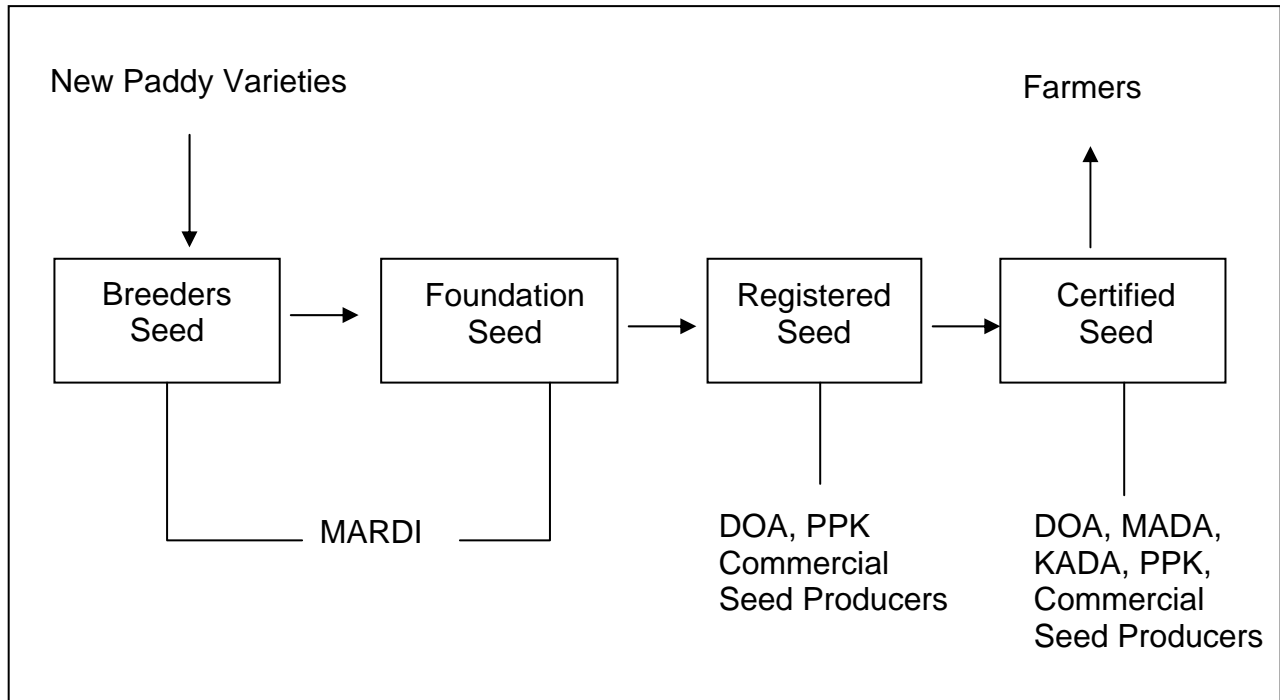


Figure 2: Processes for the quality seed production



Success Factor

- Technology for HYV is practical and really useful to farmers, large scale growers and implementing agencies.
- Linkages and networking systems between seed suppliers, extension agents, farmers and commercial growers are well established.
- Use of slow mail, fax, telephone and internet is common.
- Concerted effort by the researchers to transfer the technology.

However, for incremental productivity increase in rice production, more efforts are needed in the area of land levelling; weed, pest and disease management; and web based expert systems.

One of the more effective transfer technology strategies is to promote large scale integrated, precision farming and other high technology production systems. This will necessitate the participation of commercial farmers either at the corporate scale or highly organized GLC entities such as BERNAS.

Besides linkages among the research agencies, extension agencies, farmers and private entrepreneurs, linkages and networking with China in the form of genetic material, data exchange and training are also embarked.

Some funding from IRRI under the joint research on some aspects of breeding for quality is also being sought. IRRI's portal: www.irri.org is widely used by researchers and IT savvy large scale padi operators.

MARDI also takes part in global partnership and networking in rice genetic resources conservation and management as well as INGER (International Network for Genetic Evaluation of RICE where elite genetic materials from member countries were shared and evaluated.

Tobacco - A new package technology for tobacco production.

Background

Tobacco is an important crop for the East Coast states of Peninsular Malaysia. Currently about 12,000 ha have been grown throughout the country with Kelantan and Terengganu contributing 80% of the area.

The local tobacco industry is protected by high import tariffs. Other interventions include compulsory licensing of curers and cigarette manufactures and registration of growers; production quotas to balance production with domestic demand; guaranteed minimum prices for both green and cured leaves; setting grades and prices of leaves; controlling and regulating the marketing of green and cured leaves; and also partly subsidizing farmers for fertilizer. Extension service to both curers and growers is provided. The government also provides incentives for them to exit the crop.

Under the Common Effective Preferential Tariff Agreement of the ASEAN Free Trade Area (CEPT of AFTA), all import duties of products from member ASEAN countries

need to be reduced to between zero to five percent. All non-tariff measures also need to be dismantled. Malaysia placed tobacco (and rice) in the “sensitive list”, which will be subjected to liberalization requirements by 2010. There is a need to enhance productivity and competitiveness in tobacco production for the industry to have any chance of survival come 2010. The livelihoods of farm families that depend on tobacco farming as their main source of income will be greatly affected if the industry collapses.

The current production system is based on the traditional curer system. Under this system, the curers are given an annual production quota. This quota is determined based on the curers’ past performance in terms of their capability to fulfill past production quotas that were allocated to them. The curers would subsequently divide and allocate the quota to tobacco growers to produce the green leaves. This system separates the process of green leaf production from that of cured leaves. This system is not conducive to the production of high quality tobacco.

The new package technology is to fulfill the technological needs of the new system to make tobacco production more cost-efficient, and is targeted at tobacco growers – curers system.

The complete package technology is described in various reports provided by Musa et al. (1989); Wan Azman and Salbiah (1989); Musa and Mohd Farid (1993); and Zulkifly et al. (1993).

Technologies Promoted

- New variety “Coker Gold”
- Float seedlings
- New fertilizer formulation and recommendation
- Mechanization of farm operations
- Good agricultural practices (GAP)
- Topping flower buds and axillary buds (suckers) control

Target Group

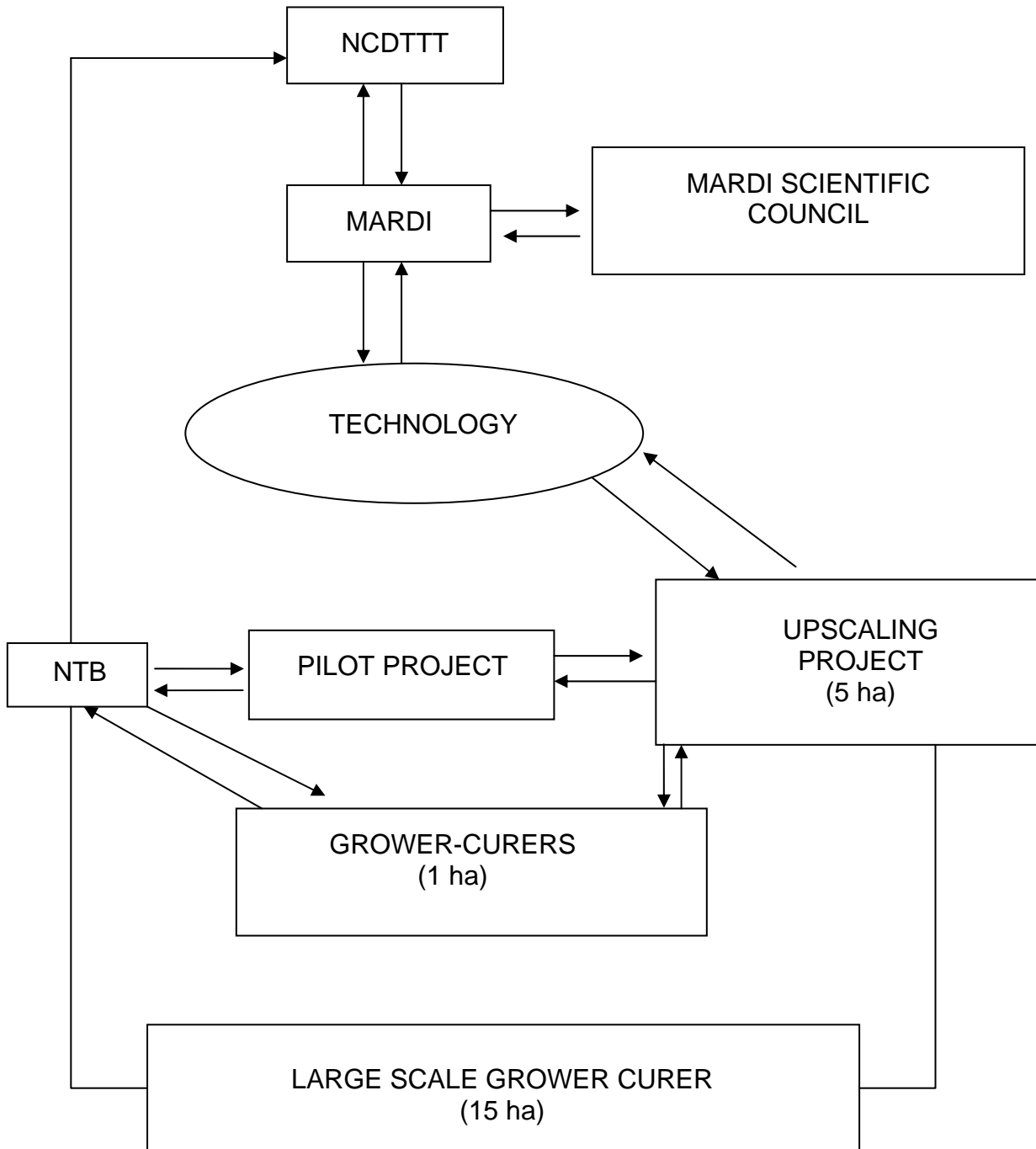
- Grower curer
- Extension Agent (NTB)

Methods

- Endorsement by the agency's Scientific Council
- Endorsement by National Committee for Development and Transfer of Tobacco Technology (NCDTTT)
- TOT new package technology through up-scaling and pilot project
- Training of extension agents and tobacco growers - curers
- Commercialization of this new package through the implementation of pilot project (1 ha farm) and large scale grower curer (15 ha)
- Impact assessment through continuous monitoring and evaluation
- Use of ICT for information retrieval technology, dissemination and data processing.

The flow of the processes is shown in Figure 3.

Figure 3: Linkages among the various sectors of the tobacco industry



Success Factor

- The efficient linkages with various sectors of the industry.
- The innovativeness of the TOT on tobacco plays an important part on the successful implementation of the system.
- Researchers spend more than 30% of their time on TOT, mainly giving seminars, running courses in the form of training of trainers, plot demonstration and farm visits.
- ICT is used as enablers in technology transfer and training.

The transfer and commercialization of this system lead to the following benefits:

- Improved yield of tobacco leaf production by 25% compared with the current system
- Improved quality of cured leaf to be at par with international standard
- Achievement of full self-sufficiency (current import level is 30%)
- Reduction of overall cost of production by 45% (from RM 11.00 to RM 6.00 per kg of cured leaf)
- Increase in yield and quality, together with reduction in cost of production of 45% will ensure Malaysia's competitiveness in tobacco production post-AFTA

MARDI and NTB also take part in seminars, conferences and field visits, organized by CORESTA as part of the international linkages and networking systems.

LESSON LEARNT

The success of agricultural development depends very much on the commitment of the government. Clear policy direction on the commodity has to be set right from the start. The government has drawn up the Third National Agricultural Policy (Anon, 1998) which outlines various measures to be taken in order to fulfil the aim of being a net exporter of food by year 2 010.

The active participation of the private sector is essential for the successful implementation of the modernisation and commercialisation of agriculture. The public sector will facilitate and enhance the delivery of support services to farmers and private sector enterprises to enable them to achieve their income and business objectives.

Infrastructure development including good ICT facilities and last mile connection is being provided.

The importance of linkages among the various agencies entrusted with agricultural development is highlighted. Close links are maintained with the various agencies in the form of MoA Inc++. Bilateral programmes and TWGs between these agencies are very important as these agencies are directly involved with the farmers.

Electronic networking exists among the various agencies through the Ministry of Agriculture's Information Highway, the *Agrolink* (www.moa.agrolink.my). This agriculture information portal provides information on the Ministry, its department and agencies and agriculture in general.

The various agencies have embarked on their own electronic networking system. One such system was also illustrated for FOA (Ahmad Puzi, 2005).

For example, information on agro marketing by FAMA is through the portal: www.famaexchange.org and www.agribazaar.com.my, while those concerning technologies are available in community-based portal : www.padinet.com.my; www.tfnet.org ; www.myfruits.org.

Other sources of electronic agricultural information is Mardinet (www.mardi.my) . A few databases and system tools have been developed by CABI International in collaboration with MARDI and other local research institutions. This includes CABI Databases, Crop Protection Compendium, CAB Publishing's Primary Journals and other system tools such as Decision Support System and Expert System.

Successful utilization of technology transfer and training system are that of packaged technologies for rice and tobacco.

The mechanism involved includes direct training, technical advisory services, up-scaling, pilot project and large scale commercialisation.

The success of rice and tobacco highlights the importance of technology transfer and networking systems among research institutions, extension services, farmers organization and private sector in order to achieve productivity and increase farmers' income.

The role of a researcher in technology transfer, training and repackaging the technology to a suitable form is important. A researcher's understanding of the industry set-up, problems that need to be solved and technology interventions that need testing would determine the adoption rate of new technology. The need for follow-through support from researchers is also important. The supporting staff should be knowledgeable and competent in handling the new technology. They should also be provided with the necessary logistics including ICT to enable them to carry out their job effectively.

CONCLUSION

From the examples forwarded, it could be concluded that the system of agricultural technology, transfer and training discussed is effective. ICT is important and functions as enablers. This system could be applied in some of the APEC member countries. There is a need to further enhance networking among APEC member countries especially in the areas of rural poverty eradication, capacity building and human capital development in order to ensure sustainable progress and competitiveness.

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GLOSSARY OF ACRONYMS

AFTA	-	ASEAN Free Trade Area
BPM	-	<i>Bank Pertanian</i> Agriculture Bank
BERNAS	-	<i>Padiberas National Bhd.</i>
CORESTA	-	Cooperation with respect to tobacco
DOA	-	Department of Agriculture
FAO	-	Food and Agriculture Organization
FOs	-	Farmers' Organizations
GAP	-	Good Agricultural Practices
GLC	-	Government linked company
GMP	-	Guaranteed Minimum Rice
HRD	-	Human Resources Development
IADP	-	Integrated Agricultural Development Project
IPB	-	<i>Bahagian Industri Padi dan Beras</i> National Paddy and Rice Division
IPM	-	Integrated Pest Management
JPS	-	<i>Jabatan Pengairan & Saliran</i>

Department of Drainage and Irrigation

KADA	-	Kemubu Agricultural Development Authority
MARDI	-	Malaysian Agricultural Research and Development Institute
MoA	-	Ministry of Agriculture and Agro-Based Industry
MoA Inc++.	-	Ministry of Agriculture Incorporated plus other agency
NAP3	-	Third National Agricultural Policy
NCDTTT	-	National Committee for Development and Transfer of Tobacco Technology
NTB	-	National Tobacco Board
PPK	-	<i>Pertubuhan Peladang Kawasan</i> Farmers Area Development
R&D	-	Research and Development
RM	-	<i>Ringgit Malaysia, (1USD = RM 3.70)</i> Malaysian Ringgit
TOT	-	Transfer of Technology
TWGs	-	Technical Working Groups
WTO	-	World Trade Organization

EXPERIENCES ON THE UTILIZATION OF AGRICULTURAL TECHNOLOGY TRANSFER AND TRAINING NETWORKING SYSTEM IN MALAYSIA¹

BY
ZULKIFLY BIN MOHD. ZAIN²

¹ Paper presented at Workshop on the Utilization of ATT&T Networking System, September 18 – 22, Medan-Indonesia

² Senior Researcher Malaysia

TOPICS DISCUSSED

GENERAL POLICY DIRECTION

- ❑ NAP 3
- ❑ Commodity Development

LINKAGES AMONG THE VARIOUS SECTOR

- ❑ Rice
- ❑ Tobacco

TRADITIONAL “NETWORKING“

ICT SUPPORT IN AGRICULTURE

- ❑ Technology and Innovation Content
- ❑ Information System Networking

GENERAL REQUIREMENTS/ISSUES ON THE USE ICT IN AGRICULTURE

LESSON LEARNT

CONCLUDING REMARKS

AGRICULTURE IN MALAYSIA

Important Component of National Economy

- ❑ GDP contribution

Dual Production System

- ❑ Small holding (1 ha)
- ❑ Large Scale / Estate / Mini Estate (MEP) 40 ha

Third Engine of Growth

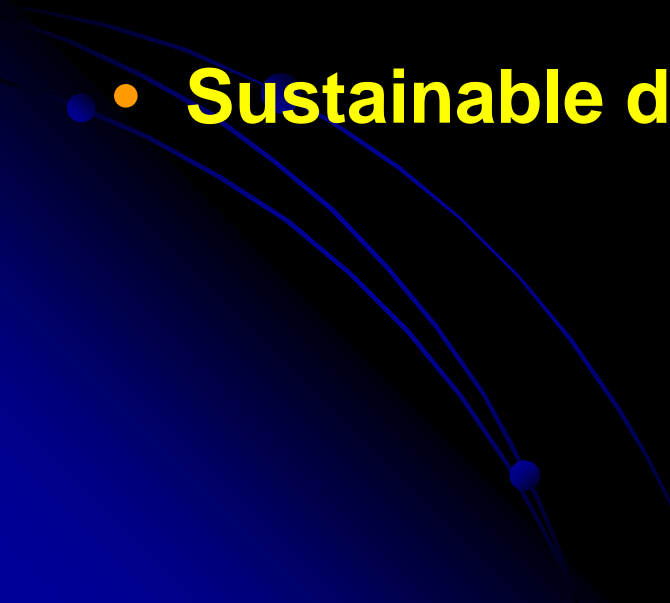
- ❑ R & D Expected to play import role
- ❑ K – based Agriculture
- ❑ Agriculture is business

PROBLEM AND CONSTRAINTS

- **Increasing food import bill**
- **Acute labour shortage**
- **Low productivity and uneconomic farm size not competitive**
- **Limited development of high value –added products; and**
- **Concern for environment**

NAP3 (1998-2010)

Objectives :

- **Enhance food security**
 - **Increase productivity and competitiveness**
 - **Establish / Improve linkages**
 - **Create new sources of growth**
 - **Sustainable development**
- 

LINKAGES

Figure 1: Linkages among the various sectors of the rice industry

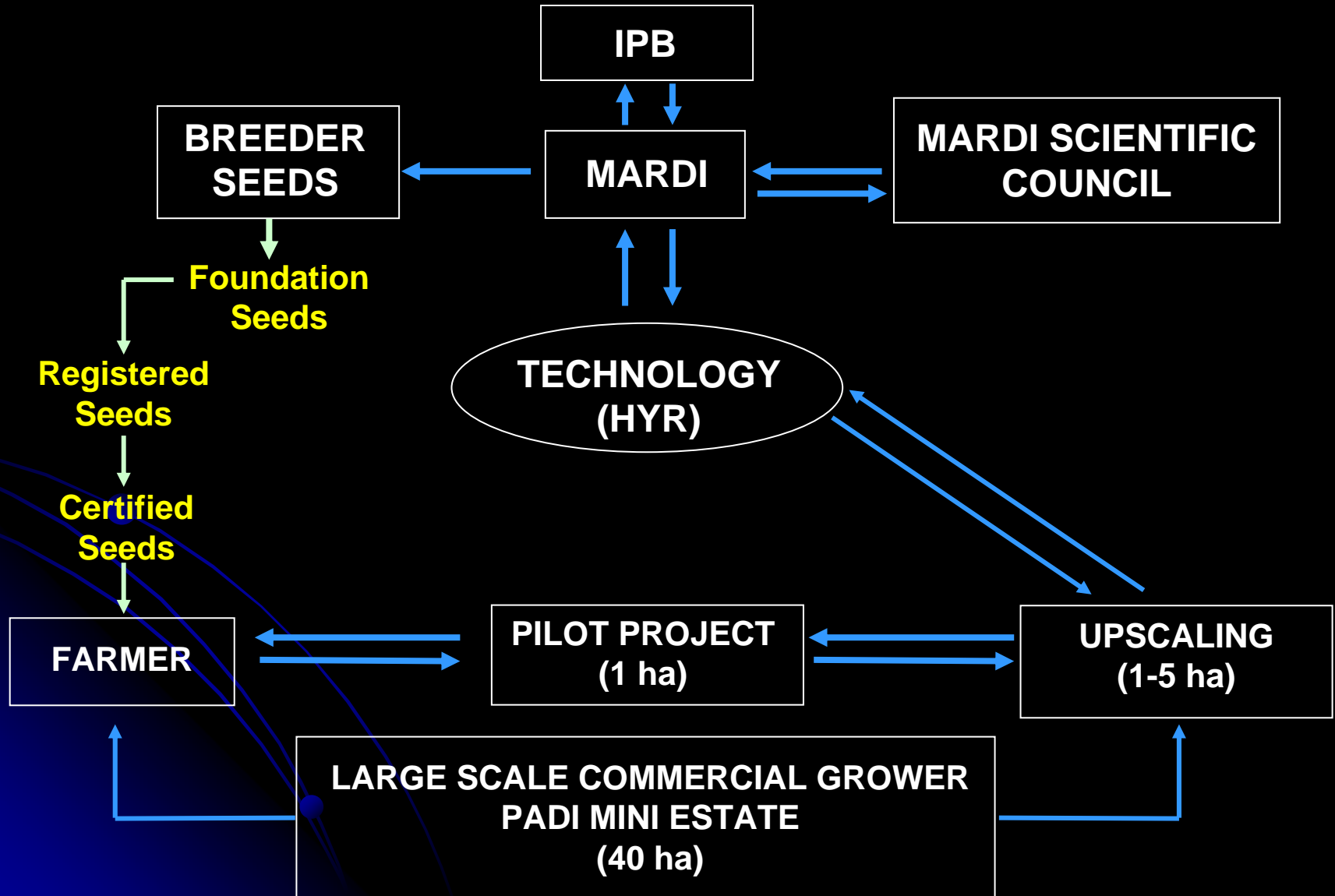


Figure 2: Processes for the quality seed production

New Paddy Varieties

Farmers

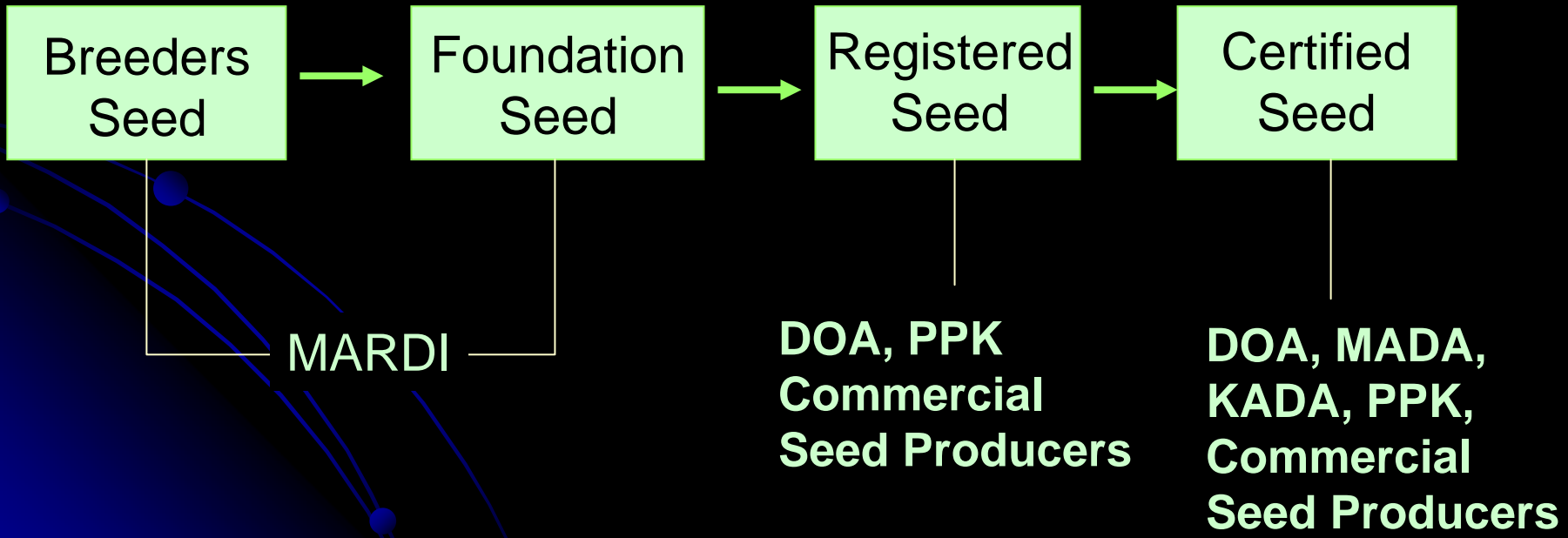
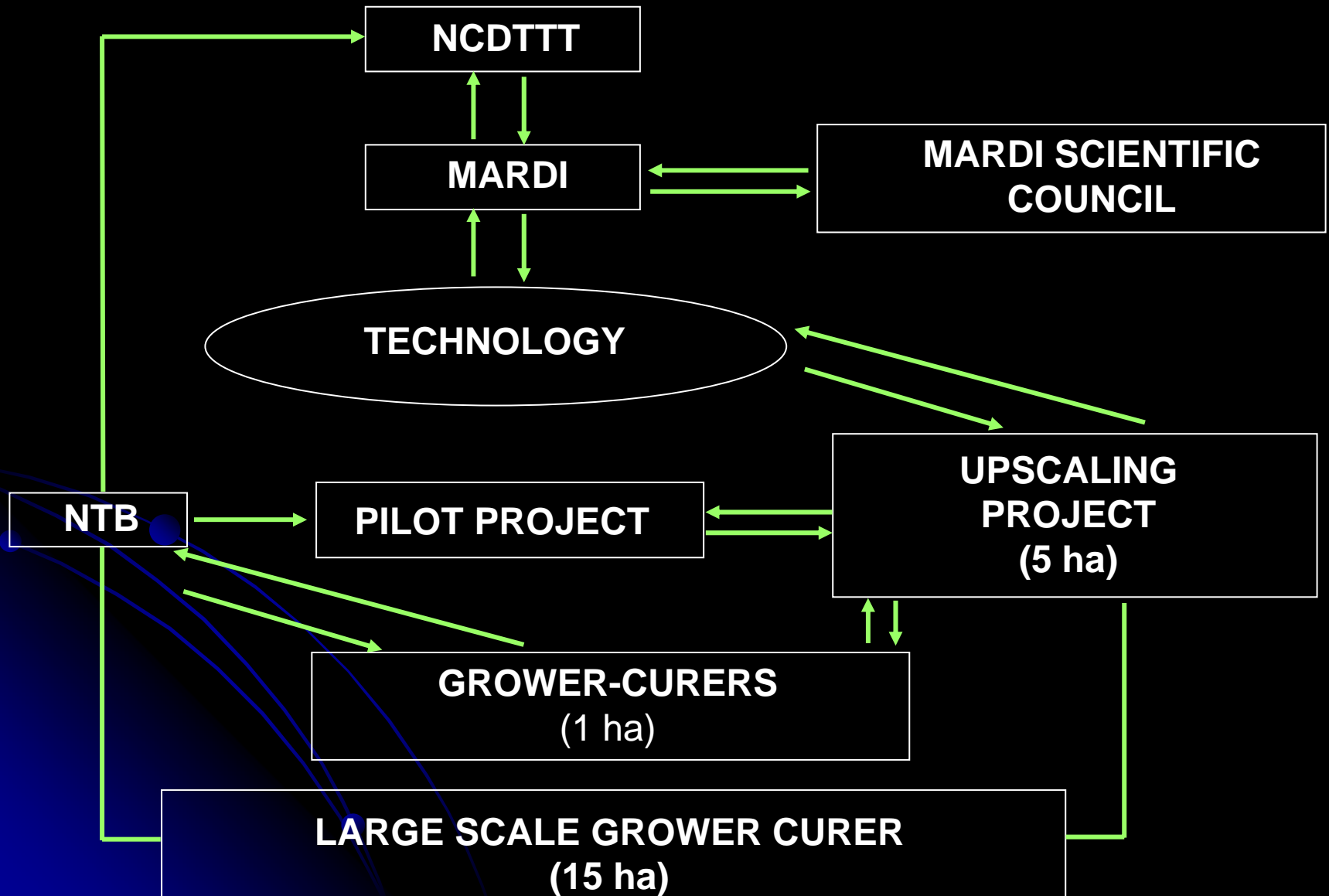


Figure 3: Linkages among the various sectors of the tobacco industry



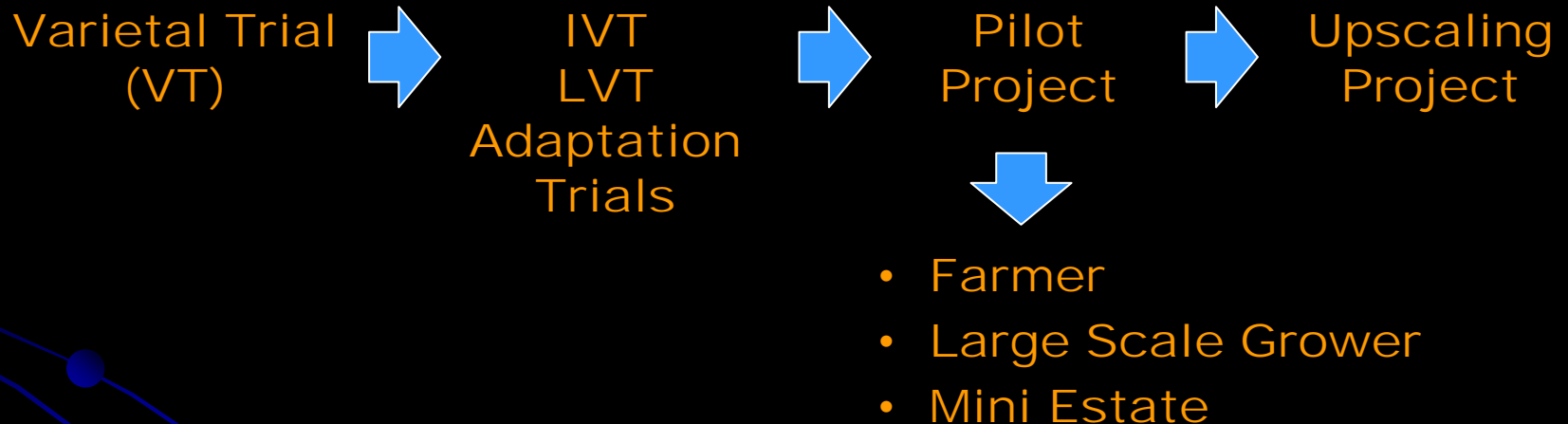
TRADITIONAL “NETWORKING”

- **Runners/Direct/face to face contact**
- **Slow Mail**
- **Telephone**
 - Fixed line
 - Hand held mobile
Now (*3G phone)
- **Fax**
Now (* internet, email)

TECHNOLOGY CONTENT

- **“Matured” and “Appropriate” Technology**

eg. All padi varieties released go through the following processes:



- **34 varieties**  4 chosen for ATT&T + Commercialisation ©

- ✓ High Yield Rice (MR219/MR220) Project * 2003-2005
- ✓ Commercialisation of Aromatic Rice (MRQ50/MRQ74) Project * 2005-2007

INFORMATION NETWORKING SYSTEM

□ **Locally, and for Internal Use**

- ❖ **Genetic Database**
- ❖ **Diagnostic System**
- ❖ **Expert System**
- ❖ **Precision Farming**

□ **Regionally; and**

□ **Globally**

- ❖ **IRRI**
- ❖ **INGER**
- ❖ **Hybrid Rice Project with China**

ICT SUPPORT

- Information Networking Systems “The Agrolink”

(www.agrolink.moa.my)

- Other sources of electronic agricultural “The Mardinet”

(www.mardi.my)

- Several community-based portals are also developed such as:
 - “**Taninet**” (www.taninet.com.my)
 - “**Padinet**” (www.padinet.com.my)
 - “**Tropical Fruitnet**” (www.tfnet.org)
(www.myfruits.org)
- 

AGROLINK

INFORMATION CONTENT

❖ INTEGRATED AGRICULTURE DEVELOPMENT PROJECT

❖ POLICY AND LEGISLATION

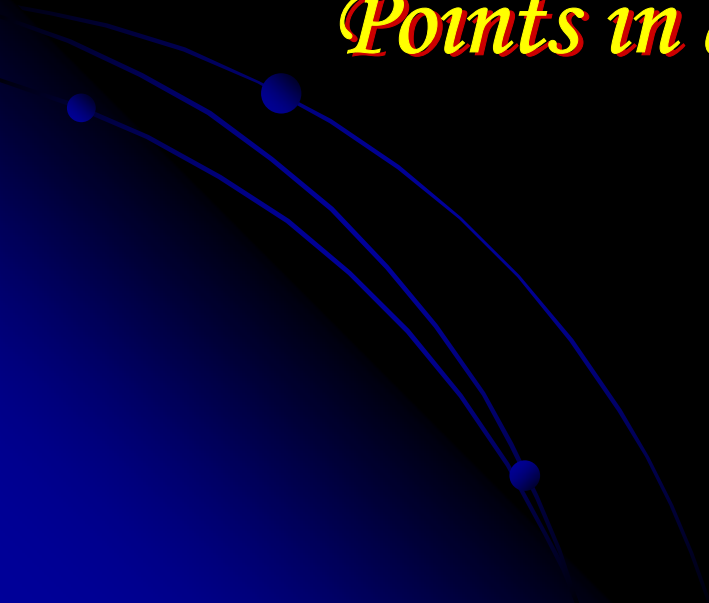
❖ MAIN PUBLICATIONS

❖ CALENDER AND EVENTS

❖ PARLIAMENTARY QUESTIONS AND ANSWERS

BUSINESS DEVELOPMENT CENTER


*One stop center electronically linking the
four Dept.
and eight Agencies with other relevant focal
Points in agricultural development*



BUSINESS DEVELOPMENT CENTER

Microsoft Internet Explorer - BDC Portal

Address: http://www.agribdc.com/index.php?ch=2



Business Development Centre

Be With Us and Succeed Together

Username: _____ Password: _____ [Sign In](#) [Forgot Password?](#)

Comodities Prices: SPINACH RM4kg A. SETAR FARM n.a. WHOLESALE 2.25 IPOH FARM 1.00 WHOLESALE 1.4

Home

Farm Management

- Industry Overview
- Potential Business
- Incentives & Funding
- Land & Water Resources
- Work Force
- Law & Regulations
- Market Analysis
- Trade Information
- Technology, R&D
- Farm Management

Fruits
Farm management for fruit plantation in Malaysia.
• Starfruit

Vegetables
Farm management for vegetation in Malaysia.
• Angled Gourd
• Bitter Gourd

Flowers
Farm management for flower garden in Malaysia.
• Anthurium

Classifieds
Malaysians are invited to partner and share their expertise, technology, skills etc. in numerous agriculture projects in Iran.
Interested, please contact: Mr Mohsen Chitsaz, Counsellor of the Embassy of the Islamic Republic of Iran at (03) 4251 4824/4830 or fax at (03) 4256 2904. Or email at

Microsoft Internet Explorer - BDC Portal

Address: http://www.agribdc.com/index.php?ch=2

Home

- Quality & Safety
- Support Services
- Statistics
- SDVI

Herbs
Farm Management on herbs garden in Malaysia.
• Aloe Vera
• Asiatic Pennywort
• Citronella
• More

Other Crops
• Cocoa
• Sweet Corn
• Sweet Potato
• More

Fishery
• Angel
• Arowana
• Barib
• More

Livestock
• Muscovy Duck
• Goat

Directory
Wholesalers
Exporters
Importers
Suppliers

Template
Marketing Plan
Business Plan Guide
Feasibility Assessment Guide

Publication
Technology & R&D
Productions
Marketing
Services
[Reports for sale](#)

Related Links
MOA | DOA | DOF | DID | DVS |
FAMA | LKIM | MARDI | FOA |
KADA | MADA | PMB | BPM |
MIDA | MATRADE |

Microsoft Internet Explorer - BDC Portal

Address: http://www.agribdc.com/index.php?ch=18

Home

Law & Regulations

- Industry Overview
- Potential Business
- Incentives & Funding
- Land & Water Resources
- Work Force
- Law & Regulations
- Market Analysis
- Trade Information
- Technology, R&D
- Farm Management
- Quality & Safety
- Support Services

Crop
Industry players are required to abide to these rules and regulations
• Pesticide Act 1974
• Plant Quarantine Act 1976
• Food Act and Food Regulations 1985
• More

Livestock
• Animal Ordinance 1953
• Control of Slaughter rules 1975
• Animal Importation Orders 1962
• More

Fishery
• Fisher
• Fisher
• Developer of Malays
• Food, Regulation

Microsoft Internet Explorer - BDC Portal

Address: http://www.agribdc.com/index.php?ch=19

Home

Market Analysis

- Potential Business
- Incentives & Funding
- Land & Water Resources
- Work Force
- Law & Regulations
- Market Analysis
- Trade Information
- Technology, R&D
- Farm Management
- Quality & Safety
- Support Services
- Statistics
- SDVI

Price Analysis
Daily, weekly & monthly price analysis for agri-food product
• Analisa Harga Sayur dan Buah, Januari 2003
• Analisa Harga Sayur dan Buah bagi Februari 2003

Market Review
Provide status and Outlook report of the industry and agriculture produce and food products
• Analisis Pasaran Industri Produk Berasaskan Surimi bagi tempoh 2002-2010
• Analisis Potensi Pasaran Produk Malaysia di Netherlands
• Halal Food Market Analysis

Market Research
Provide understanding about agri-food consumers, market place, distributions, competitions, market players etc
• Market Study on Fish Crackers in Malaysia, 2002
• Distribution System for Chilled and Frozen Food in Malaysia
• Agriculture products Flow Study in Kedah

Classifieds
Malaysians are invited to partner and share their expertise, technology, skills etc. in numerous agriculture projects in Iran.
Interested, please contact: Mr Mohsen Chitsaz, Counsellor of the Embassy of the Islamic Republic of Iran at (03) 4251 4824/4830 or fax at (03) 4256 2904. Or email at economy@iranembassy.com.my or it_emeac@tm.net.my
More on classifieds

Directory
Wholesalers
Exporters
Importers
Suppliers

Jabatan Pertanian Malaysia - Department of Agriculture, Malaysia - Microsoft Internet Explorer

Address: http://agrolink.moa.my/doa/

Welcome To The Official Site Of Department of Agriculture, Peninsular Malaysia



DOA Webmaster
Dalam LAN / Inside LAN
Luar LAN / Outside LAN

Kementerian Pertanian
Ministry of Agriculture

Intranet

Pusat Pembangunan Perkhidmatan
Business Development Centre

DOA Webmaster

Version B.Melayu English Version

Done Internet

Department of Veterinary Services, Malaysia - Microsoft Internet Explorer

Address: http://agrolink.moa.my/jph/

Jabatan Perkhidmatan Haiwan Department of Veterinary Services Malaysia

Official Website Best viewed at 800 pixels width

Whats New | Disclaimer
Tukar ke Bahasa Malaysia
1 1 4 3 4 5 Visits since
Nov. 1998

Updated - 15 Aug 2003

Department Of Veterinary Services
8 & 9th Floor, Wisma Chase Perdana
Damansara Heights, Off Jalan
Semantan,
50630 Kuala Lumpur, Malaysia

Tel : (603) 2094 0077
Fax : (603) 2094 0092

ABOUT US

- Our Vision / Mission / Objectives

OUR SERVICES

- Govt. Vet. Clinics in the Klang Valley.
- Import regulations / procedures for livestock and livestock products.
- Bringing Pets to Malaysia.
- Quarantine regulations.
- DVS Laboratory services.
- VHM Logo (food quality accreditation).
- Training / Courses for staff & public.
- MTCP information for participants

INFORMATION

- How to invest in Livestock farming
- Guidebooks on livestock farming
- Local Laws of the Veterinary industry
- Livestock production Statistics
- Agrotourism facilities at our farms
- Vacancies in the Department
- 2003 Departmental Exam schedules
- Notes from our Nipah Virus experience

LINKS

- Find a DVS Website near your area
- Website by the MTCP-ICT 2003 participants
- Website by the MTCP-ICT 2002

RELATED SERVICES

Find our addresses, tel., fax, and email from the Contact List

To get quick attention to your queries, send an email to webmaster@jph.gov.my

Meet the officers at our Customer-Days

Done Internet

Laman Web Jabatan Perikanan Malaysia - Microsoft Internet Explorer

Address: http://agrolink.moa.my/dof/

Laman Web Jabatan Perikanan Malaysia

Program Peningkatan Kualiti dan Produktiviti Jabatan

Majlis Pelancaran Skim Pensijilan Ladang Akuakultur Malaysia SPLAM Oleh : Y.B. Menteri Pertanian

Maklumat Am

- Jabatan Perikanan
- Perutusan Ketua Pengarah
- Misi & Visi Jabatan
- Pegawai kanan Jabatan
- Bah/Caw/PPN

Perkhidmatan

- Khidmat Nasihat
- Peluang Pelaburan
- Teknologi Perikanan
- Perangkaan Perikanan

SPLAM - Skim Pensijilan Ladang Akuakultur Malaysia merupakan sukarela bertujuan menggalakkan akuakultur yang baik lebih bertanggungjawab serta mesra peringkat ladang.

Maklumat Lanjut

Peluang pelaburan di dalam Industri Perikanan

Maklumat Lanjut

Pemindahan teknologi baru kepada golongan sasaran bertujuan memaksimumkan output daripada industri perikanan.

Maklumat Lanjut

14-Nov-03 12:48:17 PM

Done Internet

JPS (DID) Malaysia - Microsoft Internet Explorer

Address: http://agrolink.moa.my/did/

Jabatan Pengairan & Saliran Malaysia DEPARTMENT OF IRRIGATION AND DRAINAGE

Jalan Sultan Salahuddin,
50626 Kuala Lumpur,
Malaysia. Tel: 603-26175708 Fax: 603-26911082
Email: pro@did.moa.my

http://agrolink.moa.my/did

WELCOME ADDRESS

ABOUT US

Location
Our Logo & Song
Background History
Organisation Chart

Mission, Vision, Objective,
Core Values, Q Policy
Client's Charter
FAQs

NEWS FLASH

TV RTM1, 9:00pm: Rancangan Bersama Menteri.

For online info on rainfall, water level and flood information, visit InfoBANJIR at <http://infobanjir.moa.my>

Info BANJIR
Malaysia's Online Flood Information

Director-General's Welcome Address

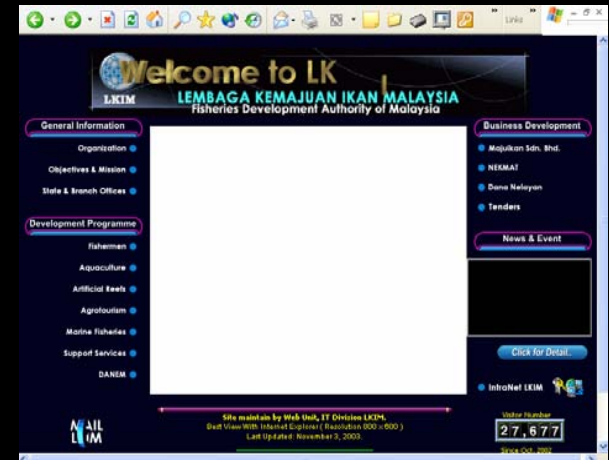
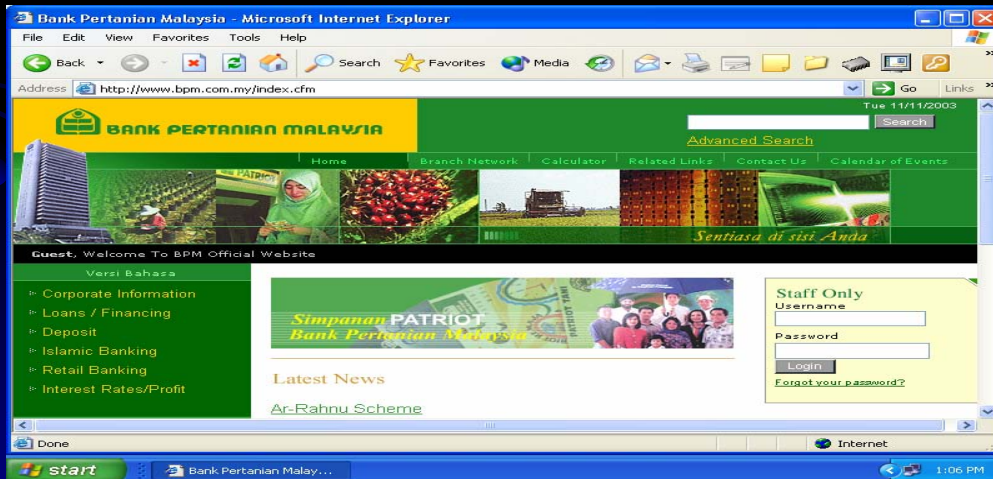
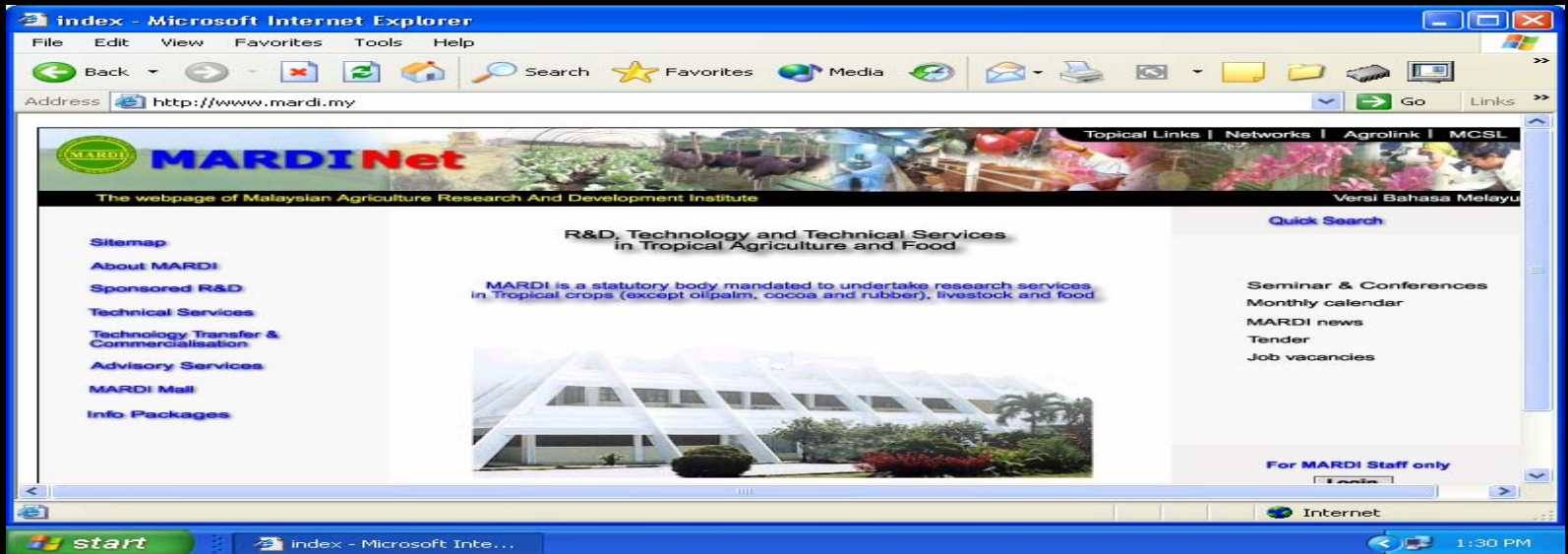
SITE SEARCH

OTHER LINKS

Web Bulletin Board
CALENDAR OF EVENTS
Management i-Diary

Tender Notice
Seminars & Courses
Web Discussion Forum

Done Internet



index - Microsoft Internet Explorer

Address: <http://agrolink.moa.my/fama/>



PERUBSARAN KETUA PENGARAH MENGENAI FAMA AKTA DAN PIAGAM MISI, PERANAN & FUNGSI STRATEGI ORGANISASI PROGRAM PROJEK PERKHIDMATAN ALAMAT E-MAIL

NEW! SSM - Penilaian Tahap Kecapaian FAMA

Ekonomi
Kejurusan
Kawasan
Pentadbiran

Untuk muat turun Adobe Reader
Sila klik di sini untuk paparan
Penilaian Tahap kecapaian FAMA

Pusat Sumber (Business Development Centre) - Agro
Gerbang Maklumat Perkhidmatan Awam Malaysia
FAO - Food & Agriculture Organization
View My Guestbook
Sign My Guestbook

Bangunan FAMA Point Lot 17304, Jalan Persiaran 1,
Bandar Baru Selayang, 68100 Batu Caves, Selangor, Malaysia
Tel : 603-61389622 Fax : 603-61383650/61385200

Paanawal Web

start index - Microsoft Inte... 1:09 PM

Laman Rasmi KADA - Microsoft Internet Explorer

Address: <http://kada.moa.my/>

RESEMI AGRO KULTURAL DEVELOPMENT ANTIPOST MAT DATANG KE LAMAN KADA

Maklumat terkini dari KA

KARNIVAL PELADANG KADA 2003

Peringkat KADA Jajahan Kota Bharu Selatan

Pada:
Selasa, 11 November 2003

SLOT KADA
RICE
SAYUR
KEDURUYAN

PADI TERNAKAN TERNAK AIR LADANG MERDEKA PADI LAMARAN MERDEKA BUKAN PADI TANAMAN BUAH-BUAHAN

PERIHAL KADA
KOMODITI
PERKHIDMATAN
INDUSTRI
EMEL PELAWAN

start Laman Rasmi KADA ... 1:19 PM

Pepper Marketing Board Malaysia Homepage - Microsoft Internet Explorer

Address: <http://www4.jaring.my/sarawakpepper/>

PEPPER MARKETING BOARD SARAWAK PEPPER

WELCOME!! UPDATED ON 24 October 2003 :

UPCOMING EVENTS

HIGHLIGHT

JPLH INTERNAL NEWS

- Seminar Usahawan JPLH, Modul - VI, Pusat Pertanian Layar Betong, 2-4 Disember, 2003.
- SME 2003. PWTC. KL. 23-25 October 2003

NEWS
PRODUCT
PMB
OC
TRADING
STATISTICS
CONTACT
FTK

Visitor number: 41999

Average Pepper Prices (Sarawak) quoted in Ringgit per 100kg on Thursday, 11/11/2003
Black Grade 1 RM402
White Grade 1 RM402

Indicators Prices FOB
Rendah
BP Brown L31 US\$1,550
PATT
WPD-BH-14111852.450

start Pepper Marketing Bo... 1:21 PM

New Page 1 - Microsoft Internet Explorer

Address: <http://agrolink.moa.my/lpp/>

LPP Online

LEMBAGA PERTUBUHAN PELADANG LPP

Jadual Perhimpunan Bulanan LPP

Ogos (5/8/2003)
September (2/9/2003)
Oktober (7/10/2003)
November (4/11/2003)
Disember (2/12/2003)

Maklumat Korporat
Organisasi
10 Perkhidmatan
Pusat Latihan
Direktori
Program LPP
Agrotourism
Projek dan PPK Flahshie

Keputusan Hari Peladangan, Pembentukan dan Melawan Kekarifan 2003

Lembaga Pertubuhan Peladang, Blok C Utara, Pusat bandar Damansara, Bukit damansara, 50460 Kuala Lumpur
Tel : 03-20945222 Faks : 03-20954239

start New Page 1 - Microso... 1:08 PM

ICT INFRASTRUCTURE

- **The National Information Technology Agenda (NITA)**
- **Government Linked Companies (GLC) are the two main Internet Services Provider (ISP)**
 1. www.tmnet.com.my
 2. www.jaring.com.my

Over 1 million users registered with these 2 ISPs
Services @ 56 kbs → 2 Mbs speed
- **3 G License given to them and another GLC**
 3. www.timedot.com.my

ICT SUPPORT BENEFITS

- **Helps new agricultural entities to operate effectively and efficiently through information network**
- **Provide information on land resources**
- **Provide information on incentives and finance**
- **Provide specialised information network**
- **Established of interactive and collaborative networks nationally, regionally and globally**

GENERAL REQUIREMENTS/ISSUES ON USE OF ICT IN AGRICULTURE

- **Infrastructure**
- **Digital divide**
- **Human resources and capacity building**
- **Relevant technology/innovation content**
- **Public awareness**
- **Other issues –**
 - Standard, economic, physical and social obstacles

CAVEATS

“Although all R&D and universities can be accessed via the internet, public access to the information is still limited to corporate and some information about function of the organization.


Except information provided on the homepages, most of the information system developed are still not accessible to the public electronically.

Most of the information is exclusively for internal use.”

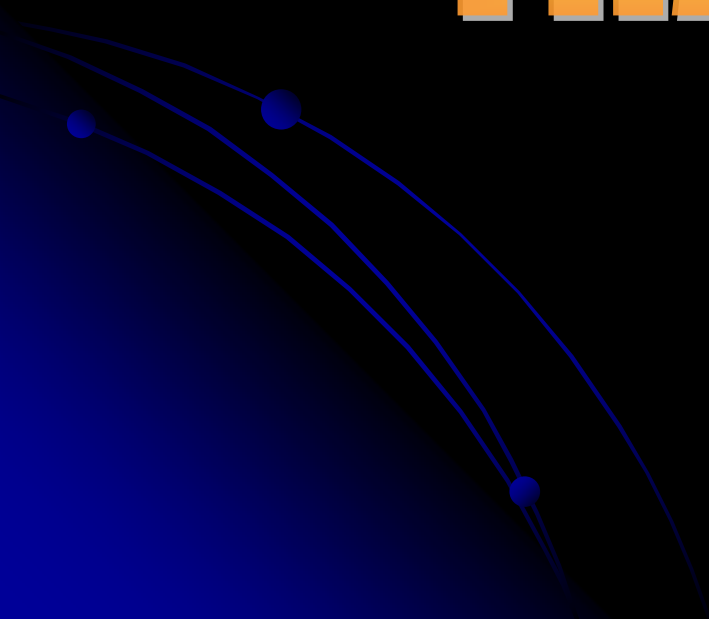
LESSON LEARNT

- **Strong commitment from the Government**
- **Clear policy guideline**
- **Good linkages among the various sectors of industry**
- **Mature technology/innovative content**
- **Good information system networking**
- **Good ICT infrastructure support**

CONCLUDING REMARKS

- **Utilization of ATT&T Networking System is effective**
 - **Direct face to face contact**
 - **Use of ICT as enablers**
 - **Need to enhance networking among APEC member economics in areas of rural poverty eradication, capacity building and human capital development**
- 

THANK YOU



How we, Tenha Organic Farm,
use the internet resource?

Tenha Organic Farm
Tai An Chen
Director

What kind of resource we get?

- Search engine
 - Searching the knowledge we interested
 - Find us
 - News searching
- Homepage -
 - information sharing
 - Platform sharing
 - <http://www.tenhagroups.com.tw/> (under construction)
- Internet store
 - <http://tenha.supergood.com.tw>
- E-mail - communication, contact with us
- Traceability connection
 - Find out our products information from internet
 - <http://taft.coa.gov.tw/>

Search Engine



Searching Result

巨農有機農場 - Google 搜尋 - Microsoft Internet Explorer

檔案(E) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 → 搜尋 我的最愛 媒體

網址(D) E8%BE%B2%E6%9C%89%E6%A9%9F%E8%BE%B2%E5%A0%B4&hl=zh-TW&lr=&start=0&sa=N

國姓, 南投縣國姓鄉中正路4段63之6號, 9, 全-6, 張清璦、林宗慶, **巨農有機農場**, 已申請條碼, 陳泰安, 根莖/ 瓜果/葉菜類, 全年, 台南仁德, 台南縣台南科學園區南科 ...
tanaka.hort.ntu.edu.tw/traceability_promotion/docs/others/2005_labeling_prompt_commun_list.xls - 類似網頁

TTV台視答錄機
發表日: 2006/8/28 上午10:21:00 發表人: 樊台聖. 主題: **有機六君子**. 內容: 請問8/28 早安您好所報導的**有機六君子**的**有機農場**在哪裡啊? 或者, 可以透漏**農場**的名稱嗎? 回覆: 回覆: 您詢問的是**台南巨農有機農場**, 電話-06-2661368, 請參考 ...
www.ttv.com.tw/Serviceweb/tvtsuggestions/message.asp?OK=1&SGID=63933 - 5k - 補充資料 - 頁庫存檔 - 類似網頁

city
1, **巨農有機農場**. 地址: , 台南縣仁德鄉仁愛村仁愛1152-1號. 電話: , 06-2661368. 傳真: , 06-2666846. E-mail: , ten.ha@msa.hinet.net. 網站: , <http://tenha.supergood.com.tw>. 聯絡人: , 陳泰安. 經營類別: , **有機農業蔬菜水果**. 經營型態: ...
www.fashop.org.tw/citydetail.asp?f_id=40 - 26k - 頁庫存檔 - 類似網頁

巨農有機農場
巨農有機農場. 每一步的用心, 給你每一餐的安心. 設為首頁, Back Office. 分類清單 ... 絲瓜 42元/斤. 售價: , \$ 42. 需求單. **有機紅蘿蔔**. **有機紅蘿蔔** 40元/斤. 售價: , \$ 40. 需求單. 最後更新: 07/04. Your Company.
tenha.supergood.com.tw/ - 42k - 頁庫存檔 - 類似網頁

巨農農場-104公司資訊中心
巨農農場, **巨農農場**, 本農場成立於94年8月, 主要為種植**有機蔬菜**, 歡迎有興趣的你一起加入我們. ... 農產畜牧寵物相關業, 金融證券產險相關業, 人壽保險業, 進出口貿易商, 企管及其他工商顧問, 法律會計建築事務所, 人力仲介代徵, 政治宗教公益民間團體 ...
www.104info.com.tw/comp/2661368000.htm - 137k - 頁庫存檔 - 類似網頁

桃園旅遊網-桃園旅遊的好伙伴
紫城農城位於楊梅鎮三湖里, 是本鎮頗具規模之蔬菜育苗場, 本場結合生產. 地圖: 景點 住宿 餐飲 交通 **農場**. 向陽**農場**. 位於桃園觀音鄉的向陽**農場**佔地10000坪, 為北台灣最大

開始 | A... | H... | H... | t... | 巨... | 未... | K... | CH... | 書...

Internet store

巨農有機農場 - Microsoft Internet Explorer

檔案(E) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 → 搜尋 我的最愛 媒體

網址(D) http://tenha.supergood.com.tw/supergood/front/bin/home.phtml 移至

每一步的用心，給你每一餐的安心

順田自然
巨農有機農場
應心有機農業發展基金會驗證通過

巨農有機農場

每一步的用心，給你每一餐的安心

設為首頁 登入 註冊 Back Office 我要訂房

最後更新：09/12

分類清單 ■ 葉菜類 ■ 根莖類 ■ 瓜果類	有機紅蘿蔔 40元/斤 售價：\$40	A菜 售價：\$35	青江菜 售價：\$35	油菜 售價：\$35
	清泉菜 售價：\$35	廣島白菜 售價：\$35	紅莧菜 售價：\$35	東京白菜 售價：\$35

會員帳號：
會員密碼：
會員登入

加入會員 忘記密碼

http://tenha.supergood.com.tw/supergood/front/bin/ptdetail.phtml?Part=L006

網際網路

Back Office control

Welcome to BackOffice - Microsoft Internet Explorer

檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

地址(D) https://tenha.supergood.com.tw/supergood/backoffice/biz/main.phtml?Programid=30newizard

搜尋 我的最愛 媒體

Google 搜尋 7已下載 檢查 選項

歡迎來到 巨農有機農場 首頁精華

Version 5.0.1 Welcome, admin 登出

輸入標題或內文中的文字，搜尋出相關路徑：

Search: 查詢

10 M 您已經使用了 468 Kbytes (5%) 的空間

LOGO Banner

巨農有機農場 首頁連結 每一步的用心，給你每一餐的安心

分類清單	首頁商品	新增 排序	最後更新: 2006-09-12	
分類清單 新增/排序	• 東京白菜	• 有機紅蘿蔔	• 廣惠白菜	• A菜
• 葉菜類	• 青江菜	• 紅苜菜	• 福泉菜	• 油菜
• 根莖類	• 絲瓜	• 冬瓜	• 大黃瓜	• 翡翠苦瓜
• 瓜果類	• 小松菜	• 空心菜	• 野燻菜	

會員登入

Your Company 編輯

ToMeet ToMeet Tools

完成

Version 5.0.1 Welcome, admin 登出

安裝日期: 2003-04-12

安裝日期: 2003-04-12

安裝日期: 2003-04-12

安裝日期: 2003-04-12

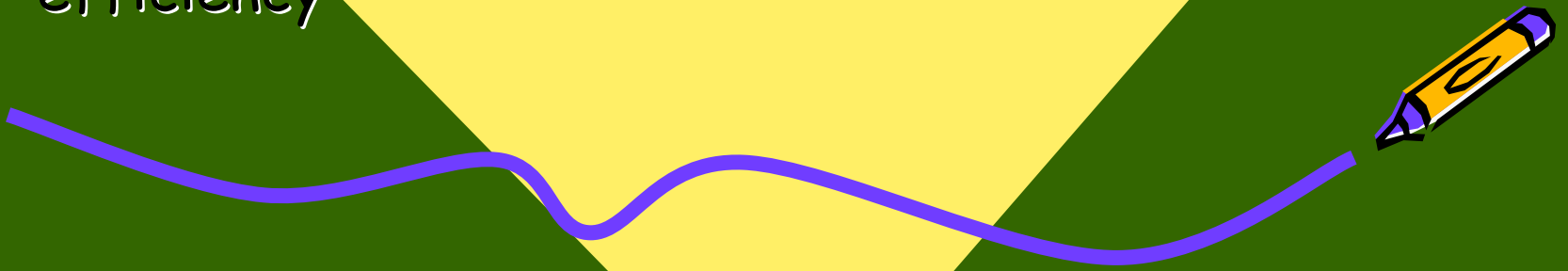
安裝日期: 2003-04-12

安裝日期: 2003-04-12

E-mail function



- Reconfirm the information that you want.
- Request some documents when you need.
- Communication with your friends or staffs world wide only spend few minute.
- Saving Time and \$
- efficiency



Traceability system in Chinese Taipei

臺灣農產品安全追溯資訊網 Taiwan Agriculture And Food Traceability System - Microsoft Internet Explorer

檔案(E) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 → 搜尋 我的最愛 媒體

網址(D) http://taft.coa.gov.tw/index.asp?a=mp&mp=3 移至 Google

Taiwan Agriculture and Food Traceability System

Welcome Page
Visitor Counter : 2523

About TAFT Trace and Track Food Tracing in Taiwan

Latest TAFT Record

- 苗栗縣苑裡鎮稻米產銷班第四班(山水有機米產銷班)
- 林內鄉農會木瓜產銷班第二班
- 喬安有機農場
- 華勝有機農場
- 兆豐興農股份有限公司(鴻喜農場)

...More

【Food Tracing in Taiwan】

Implementation of food traceability system has gained global attention. The purpose is to enhance quality and safety of foods especially focusing on fresh produce. The promotion of such system in Taiwan is to strengthen the confidence of global consumers in agricultural, fishery and livestock products of Taiwan.

Taiwan, an island full of high mountains, is located at the junction of subtropical and tropical zones. Such a geological location enabling the production of vegetables and fruits produced in temperate, subtropical and tropical zones. Over the past 60 years since the end of the World War II, Taiwan has been polishing its farming technologies and it is known worldwide for quality produce and processed foods. In order to further distinguish Taiwan's quality produce in the local and international markets, enable the cultural information transparent to the general public, provide consumers wit...

Complete Text

Trace Code Search

Please enter the trace Search

Sponsor: acer AMD Microsoft

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37 Nan Hai Road, Taipei, Taiwan 100, R.O.C.; Tel: 886-2-2381-2991

完成 網際網路 下午 07:30

http://taft.coa.gov.tw

How to use traceability system in Chinese Taipei?

- Find out the trace code on package of product.
- Scan the bar code in the store, or
- Go into the website, <http://taft.coa.gov.tw/>, then put the trace code in.

Traceability Vegetable

Advertisement
Label



Trace
Code
Label



Trace Code Label

Two Dimension Bar Code

有機青江菜

追溯號碼 540064104454668



包裝日期 2006/08/10

4 7 13327 500226 250gs P04

巨農有機農場
有機 TOAF 認證號碼：3052
追溯查詢網址：<http://taft.coa.gov.tw>



Trace Code

Old Version

產銷履歷農產品

特級胡瓜

追溯號碼 77066-22002-77066



包裝日期 2006/08/10

4 7 13327 062755 P50 \$100

追溯網址 <http://taft.coa.gov.tw>



New Version

Advertisement Label

有身份的履歷蔬果

買的安全，吃的安心

生產單位	產品名稱		 中華民國蔬果身分證
如 標 示	台灣產區蔬果		

農產品產銷履歷成果推廣行銷執行單位



財團法人全方位農業振興基金會

日月年生出	名姓		 中華民國國民身分證 
	陳 泰 安		

(中市) 85年1月31日換發

Just Sample

Input the trace code

臺灣農產品安全追溯資訊網 Taiwan Agriculture And Food Traceability System - Microsoft Internet Explorer

檔案(E) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 → 搜尋 我的最愛 媒體

網址(D) http://taft.coa.gov.tw/index.asp?a=lp&ctNode=67&CtUnit=43&BaseDSD=26&htx_ProductOrg=114684 移至 Google www.taft.coa.gov.tw

Taiwan Agriculture and Food Traceability System

Welcome Page Home
Visitor Counter : 2516

About TAFT Trace and Track Food Tracing in Taiwan

Latest TAFT Record

HOME > Trace and Track

- 苗粟縣苑裡鎮 稻米產銷班第四班(山水有機米產銷班)
- 林內鄉農會木瓜產銷班第二班
- 喬安有機農場
- 華勝有機農場
- 兆豐興農股份有限公司(鴻喜農場)

...More

Batch List

Page 1/1, total 12 records. Go to 1 th. page, 15 records each page.

巨農有機農場, 2006, Batch 28th.	wax gourd	Organic
巨農有機農場, 2006, Batch 27th.	cowpea	Organic
巨農有機農場, 2006, Batch 22th.	ceylon	Organic
巨農有機農場, 2006, Batch 21th.	amaranthus	Organic
巨農有機農場, 2006, Batch 20th.	kangkong	Organic
巨農有機農場, 2006, Batch 19th.	squash	Organic
巨農有機農場, 2006, Batch 18th.	bitter gourd	Organic

Trace Code Search

466080011104455 Search

trace the growth records

資訊網 Taiwan Agriculture And Food Traceability System - Microsoft Internet Explorer

視(V) 我的最愛(A) 工具(T) 說明(H)

搜尋 我的最愛 媒體

a.gov.tw/index.asp?a=lp&ctNode=69&CtUnit=45&BaseDSD=26&htx_ResumeCode=3833864

● **Cultivation record**

VIPS Code : 466080011104455

Info for communication

Brief introduction of farmer



- Name : 李惟裕
- Place of Origin : 臺南縣仁德鄉
- Production Organization : 巨農有機農場
- TEL : 06-510-3248

Cultivation information || Cultivation record
After harvest || Examined information || Accreditation

Cultivation information

Cultivation No. :	10041406280001
Producer :	李惟裕
Identity :	Normal
Production Organization :	巨農有機農場
Cultivation section :	臺南縣仁德鄉十三甲段1219號
Cultivation area :	0.1 ha.
Organic :	Yes
Crop(variety) :	wax gourd (吉峰二號)
Harvest :	Yes

資訊網 Taiwan Agriculture And Food Traceability System - Microsoft Internet Explorer

視(V) 我的最愛(A) 工具(T) 說明(H)

搜尋 我的最愛 媒體

a.gov.tw/index.asp?a=lp&ctNode=69&CtUnit=45&BaseDSD=26&htx_ResumeCode=3833864

2006/8/26	harvesting	harvesting	採收量：冬瓜167公斤
2006/8/25	harvesting	harvesting	採收量：冬瓜217
2006/8/24	harvesting	harvesting	80+137
2006/8/22	harvesting	harvesting	採收量：冬瓜1.5公斤
2006/8/14	weed control	manpower weeding	採收量：冬瓜3公斤
2006/8/4	field management	理蔓除蔓	
2006/8/3	weed control	manpower weeding	
2006/8/2	fertilizing	fertilizing	施用肥料：福壽實業股份有限公司福壽牌菜籽粕60000g
2006/7/31	other	other	
2006/7/31	other	other	

What benefit we got from the internet?

- Consumers find us from the internet.
- Share our information or news to interested people
- Sale our vegetables from internet
- gather the demands of consumers
- Consumers place more reliance on traceability vegetables via internet connection.



Thank you
very much

Vietnam Agriculture Extension System and services to farmers



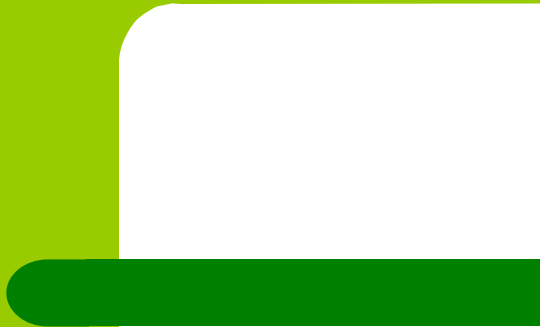
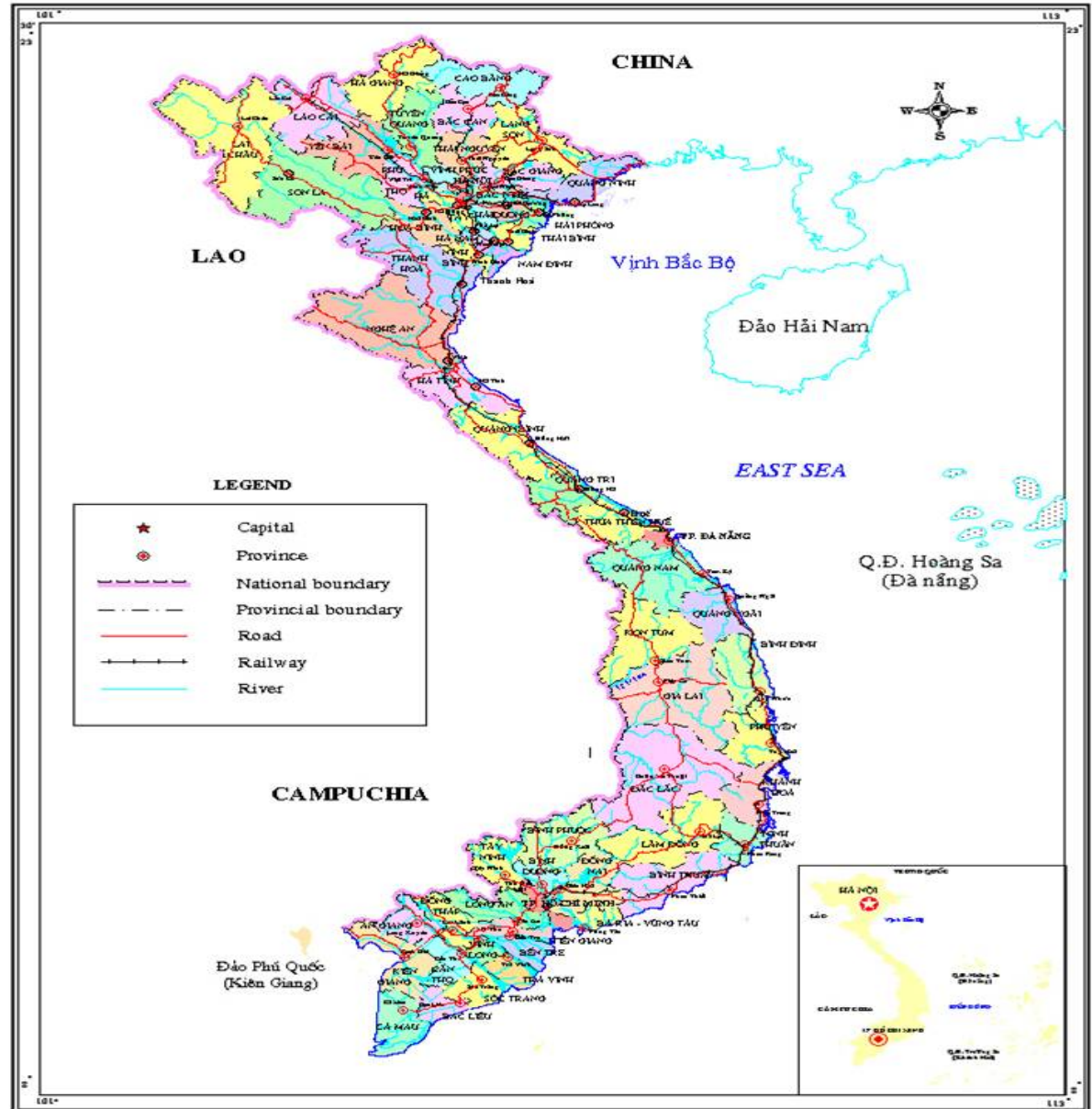
Vo Ngan Giang - National Agricultural Extension Center
Ministry of Agricultural and Rural Development, VIETNAM



Content

- What is the agriculture extension system in Vietnam?
- What have been done in 1993 up to now?
- What we will do in future?

ADMINISTRATION MAP - VIETNAM

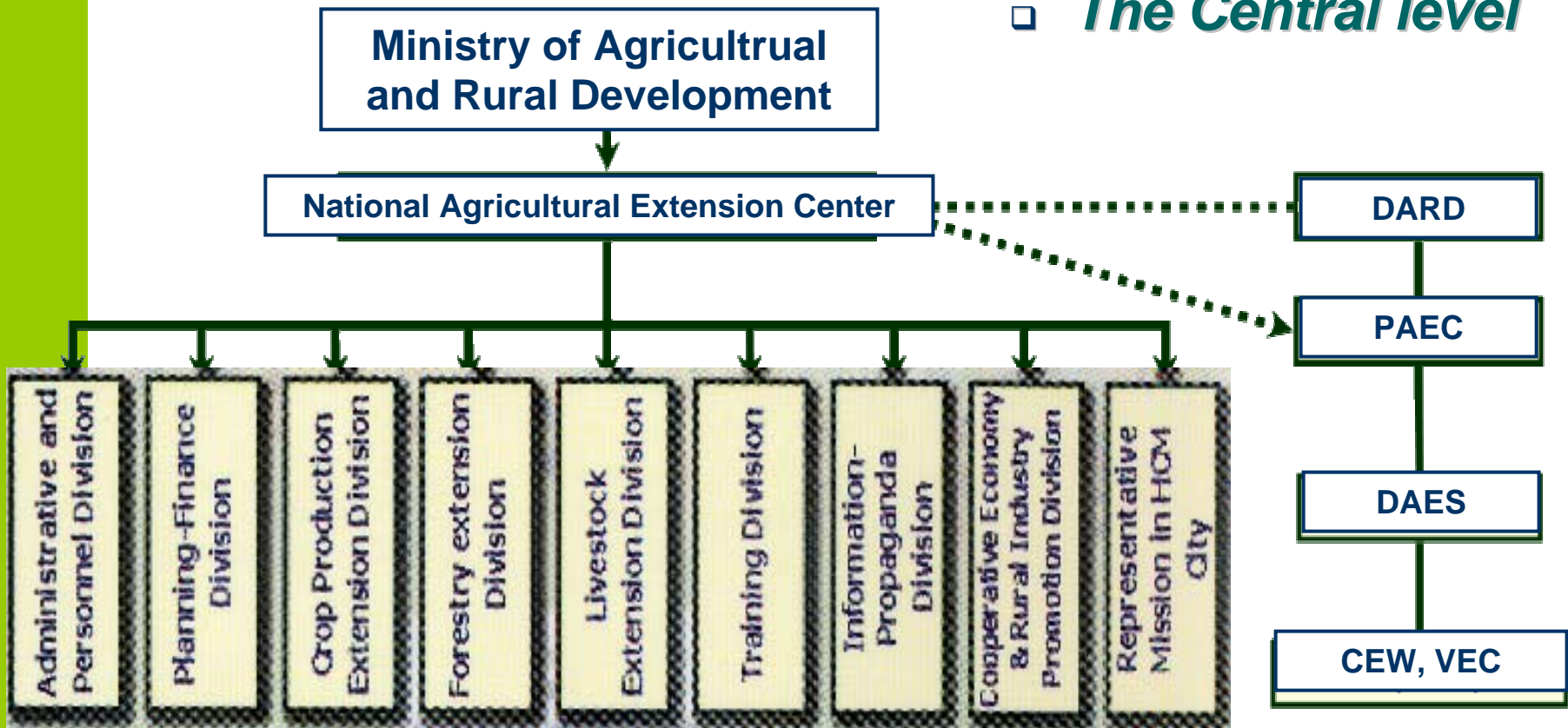


What is the agriculture extension system in Vietnam?

- **Central : National Argriculture Extension Centre (NAEC)**
- **Local : Provincial AEC, AE Station, AE network at commune/village level**

Our system

▣ *The Central level*





Our system

- ❑ ***The local level***
 - **Province: 64 Agriculture Extension Center: 1.446 staff**
 - **District: 520/637 district have AE Stations (Acc. for 80%), 1.716 staff**
 - **Commune: 7.343 staff (Acc. for 71% of total communes)**
 - **Village: 3.918 AE clubs with 76.300 members**
- ❑ ***Coordinating agencies***

There are 122 agencies including research institutes, research centers, training colleges, associations, mass organizations, enterprises, media and others



Our activities

- ❑ **Communication and advocacy**
- ❑ **Capacity building and training**
- ❑ **Demonstration plot and technology transfer**
- ❑ **Consultancy and service**
- ❑ **International cooperation**

What have been done in 1993 up to now?





What we have been done?

1. *Demonstrations plot and technology transfer*

- Yearly there are thousands of demonstration pilots set up throughout the country
- The most outstanding achievements are the technology produce hybrid rice variety F1, set up nursery plant siblings, re-plantation and intensive plantation forestry plants, industry plants, fruit trees, restructure of plantation, lean meat pig breeding technology, improving an yellow cattle breed, rehabilitation and development of village traditional vocation, conservation, processing agricultural product



What we have been done?

2. Capacity building and training

Hundreds of capacity building and technical training courses are yearly organized for 5,000 extension staff and 10,000 farmers.

3. Communication and advocacy

- Publish monthly 4,500 – 5,000 Agricultural Extension Bulletins, large number of extension document and books and distributed to districts, communes.
- Website set up and provides daily update information for extension workers, farmers and other.
- 200,000 books and 20,000 technical drawings, leaflets, 5-6 sets of technical CD are early produced.
- Coordinate with 40 media, newspaper, journal agencies internally and externally of the agricultural sector.
- Different TV, Radio Programs (Country Today, Discuss With Farmer About How To Become Get Rich, Telling Farmer)

Our Strengthen and weaknesses

Strengths and weaknesses of AE structure and management system; Human resource; Finance; AE services...



AE Structure and Management System

<u>Strengths</u>	<u>Weaknesses</u>
Formulation of AE system from central to locality	Grassroots AE system remains weak
Formulation of organization structure with roles and responsibility according to the Government degree	A network of coordination with outside organizations and agencies is not available
Sectoral management from central to locality	Monitoring and Evaluation system is not strong enough
Period planning of national AE programs	Limitation of local participation

Resources

Strengths	Weaknesses
Government support of finance and materials	Finance is not enough response to demands, dependence on the Government
Human resource is trained and distributed to province, district and commune	Shortage of quantity and quality human resource. Lack of effective and sustainable approaches
Farmers actively participate in and contribute to AE activities	Training and development of grassroots AE workers is not prioritized
Socialization of AE activities	Not maximized mobilization potential of organizations and private sectors in AE activities

Agriculture Extension Service

<u>Strengths</u>	<u>Weaknesses</u>
Diversified services: training, demo plots, technology transfer, market, product conservation and processing...	Quality of service is not satisfied. Cost/effectiveness analysis is not done for each kind of service
National wide	Expanded service, not focus on prioritized subject/zones
Macro orientation in line with Government policy and direction	Not yet compromise between local diversified demands and National strategic direction
Provide material, siblings, breeding animals, technology etc, for set up demo plots.	Subsidized service. Not existing a mechanism of profit estimation and division between delivers and recipients.

Opportunities and Challenges

<u>Opportunities</u>	<u>Challenges</u>
Agriculture production is main incomes of farmers	Low effectiveness of agriculture production
High demands of AE service	Small, cluster household production
Government has policies to support agriculture extension activities	Volume and quality of agriculture product is still low, informality, high production cost
Existing AE system from central to locality	AE service is not satisfied demands. Quality and effective of service is not high
Market for agriculture product exportation is available	Unstable market. Competitive with imported agriculture product.
Available rural labor resource	
Agriculture production diversity	
Agriculture extension socialization	

What we will do in future?

Vietnam agriculture extension system becomes strong, flexible and effective to response to the needs of agriculture production and rural developmen, fit with a trend of international and regional economic integration.

Vietnam agriculture extension system bring more service to farmer.

Key Principles to work

- **Sustainability**
- **Effective**
- **Democracy (*participatory*)**
- **Transperancy**
- **Ownership**



Some pictures



Thank you.



Farmer livestock School (FLS/SLC)

A good example of delivery training to farmers

- Principles of FLS
- FLS Implementation Steps
- Successes and Limitations
- Suggestions and Recommendations



Small Livestock Component

- is a part of the **Agricultural Sector Programme Support (ASPS)** sponsor by **Danish International Development Agency (Danida)**. Small Livestock Component is hosted by the **National Extension Centre**, under Ministry of Agriculture and Rural Development (MARD)
- **Objectives:** SLC aims to improve the income and performance of small holders, particularly poor farmers, who engage in pigs and poultry production.
- **Project period:** from 2000 to Dec., 2006.
- **Pilot sites:** 3 provinces in the North of Vietnam (Thai Binh, Thanh Hoa and Nghe An) and expand into 3 more province in the North mountain area in 2006.
- One of the main SLC activities is organizing technical training courses for farmers through Farmer Livestock School (FLS)

FLS Principles

- Using **Participatory Methods**: oriented training, combine theory and practical learning exercises
- **Suitable for farmers to learn**: module contents, information provision and training manuals are basic, short and be summarized from the real life of small livestock production
- **Focus on the farmers**: farmers are provided additional knowledge based on their experiences and have chance to discover new techniques.



FLS Principles (con't.)

- **Two ways of communication:** Trainers give guideline and provide favorable conditions for farmers to exchange their knowledge and experiences at the same time with provision addition knowledge and new techniques
- **Increasing the farmer's abilities to decide:** farmers apply new techniques into their livestock production
- Ensure the **sustainability of FLS model**

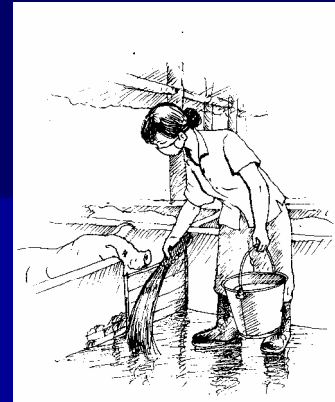


FLS Implementation Steps

- Agreement on the approach methods
- Produce training manual
- Training of Trainer (TOT)
- Organizing FLSs for farmers (local trainers responsibility)
- Testing and piloting village livestock production model
- Capacity building for local service providers (training, equipment provision, study tour...)

Produce Training Manual

- A set of FLS training manual was developed including Smallholder Semi-scavenging Chicken Production, Duck/ Moscovyduck Production and Pig Production.
- Each manual included: training method, using manual guideline and livestock technical modules
- Manual were compiled by livestock experts with additional experience from TOT and farmer training courses which were held in pilot sites



Organize training of trainer courses (TOT)

- 7 TOT courses (over 170 participants) on small livestock production (pig, chicken and duck) for 3 pilot provinces
- Training contents: Participatory training methods and basic techniques for small livestock raising
- Trainers: Local staff were selected from Extension and Veterinary Units, Women Union, Farmer's Association at provincial, district and community levels.



FLS training courses

- FLSs are intensive training courses for group of 20-25 farmers who meet on the weekly basis for 3 - 4 hours; each course is about 2,5 - 4 months.
- The training course included different training modules on animal health, husbandry, feeding, data recording, economics, manure management, etc.
- Trainers are local extension, livestock and animal health staffs.



Organize Farmer Livestock School (FLS)

- Trainees are poor farmers from pilot communes who have done or are planning in small livestock raising (priority for women and farmers from ethnic minority).
- FLS Training organized in the village and practiced on-farm; timetable were decided by farmers
- Encourage trainees to exchange knowledge, raising problems and finding solutions for small livestock production



Successes

- **Meet farmer's need, improve decisive characteristics for farmers in small household production.**
- **Training methods which based on practices (learning by doing) help farmers learning faster.**
- **Create friendly environment for exchanging information on animal production between trainers and farmers, farmers and farmers**
- **Contribute in capacity building for staffs at different levels on animal production, on knowledge transfer methods**
- **Social impacts: Improve relationship between staffs and farmers, Gender equality, and women role in society**
- **Farmers are more confident and being more respected**

