



# KATC NEWS

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MINISTRY OF AGRICULTURE AND FOOD SECURITY  
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## KATC PHASE II PROJECT GOES THROUGH MID-TERM EVALUATION

*By R. J. Shayo\**

**M**id-term evaluation for the five year KATC Phase II Project was conducted as scheduled from 20<sup>th</sup> May to 24<sup>th</sup> May 2004. This was conducted by a team jointly formed by JICA and the Ministry of Agriculture and Food Security.

Members of the JICA Team which was led by Mr. Ryuzo NISHIMAKI included Mr. Kazuhiko KITAGAWA, Ms. Keiko ITAGAKI, Mr. Hiroaki



The Permanent Secretary for The Ministry of Agriculture and Food Security Mr. Wilfred Ngirwa (in a grey suit) together with a team leader for KATC II mid -term evaluation Mr. R. Nishimaki (right) in a signing ceremony of evaluation report at the ministry headquarter in Dar es salaam.

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Mid-term evaluation team listening to presentation from KATC II steering committee presenters

NAKAHORI, and Mr. Mitsuo NISHIYA. On the Tanzania side the Team was led by Eng. Gabriel M. Kalinga. Other members included Mr. N.Ndauka, and Mr. James Ngirwa from Ministry of Agriculture and Food Security. JICA Tanzania Office was represented by Ms. Matsu-shita.

The Team started its five days assignment with rigorous interviews of KATC staff, followed by a tour of Mombo

Irrigation Scheme and interview of Ministry and JICA Tanzania Officials.

The evaluation report was then presented to the Forth Joint Coordinating Committee Meeting of the Project chaired by the Permanent Secretary of The Ministry of Agriculture and Food Security Mr. Wilfred Ngirwa. After some discussion, Committee members agreed with the following observations and recommendations made by the Evaluation Team.

- KATC II Project was still very relevant for the improvement of the wellbeing of small-holder irrigators.
- The Project was being implemented as planned, and some impact had been registered in most model sites with the exception of those schemes severely affected by drought..

- Disbursement of funds to KATC was still inadequate compared to the cost of implementing model-site activities. Therefore the Government of Tanzania should consider enhancing the Centre adequately so as to fully utilize the existing and material re-

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The team leader for the KATC II mid-term evaluation team from JICA Tokyo exchanging evaluation report with Eng. G. Kalinga who was leading Tanzanian side.

\*KATC Principal

### KATC PHASE II PROJECT GOES THROUGH MID-TERM EVALUATION ( from page one)

- Farmers in Nduguti Model-site who were severely affected by drought should continue to receive training using the nearest model site.
- KATC should start working very closely with district councils in order to convince them to use the Centre more and more for training farmers and extension workers.

I would like to take this opportunity on behalf of the centre to thank all the stakeholders for the KATC phase II project especially farmers, model scheme leaders as well as respective district councils for their good cooperation that contributed much to the success of the project. With this remark KATC

urges all to maintain the move they have started as we still have much to do ahead of us.

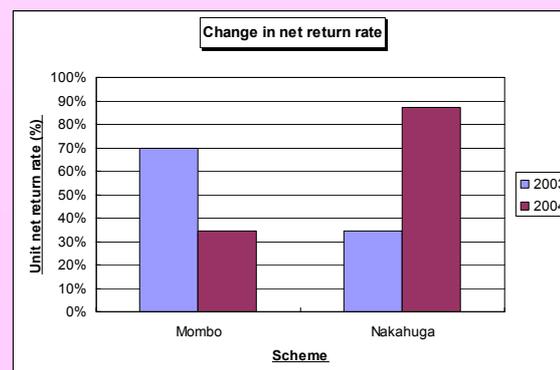
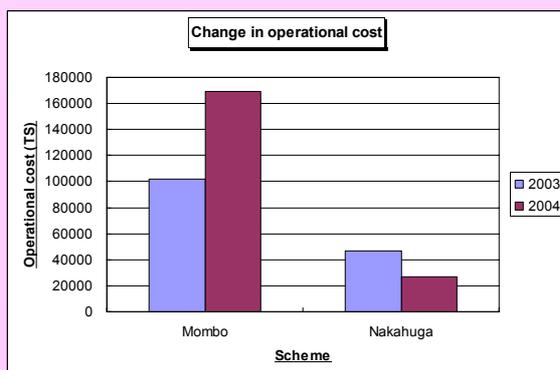
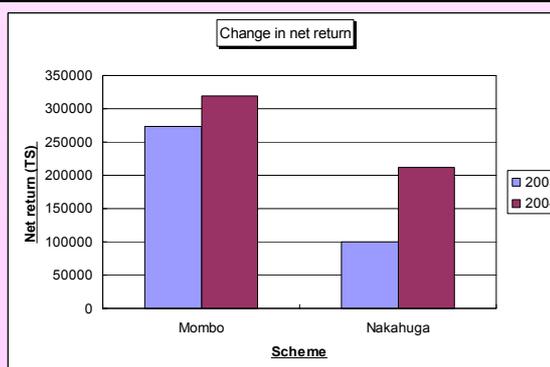
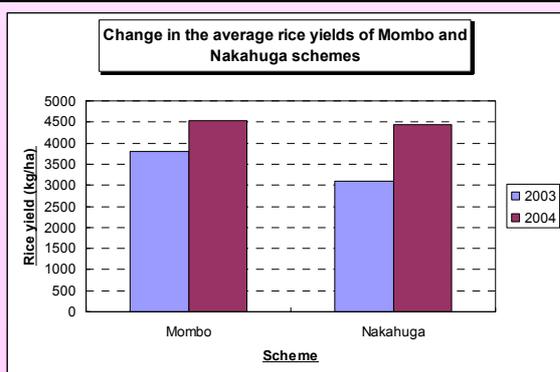
One of the best key farmer from Mombo model site giving explanations to other farmers during the farmers field day conducted at the scheme



The following is the statistical data indicating the change in farming indicators for two irrigation model sites involved in KATC II Project training before and after KATC intervention

**Table 1. Comparison of the change in farming indicators in average per household of Mombo and Nakahuga model sites between 2003 and 2004**

Indicators	Mombo		Nakahuga	
	2003	2004	2003	2004
Yield (kg/ha)	3799	4532	3095	4443
Cultivated area (ha)	0.60	0.51	0.37	0.19
Production (kg)	2,209	2,285	903	847
Unit rice price (TS/bag)	11,798	14,874	11,725	19,465
Gross return (TS)	375,470	487,798	146,763	238,683
Unit gross return (TS/ha)	638,429	967,040	499,701	1,248,339
Operational cost (TS)	102,007	168,944	46,426	27,108
Net return (TS)	273,463	318,854	100,337	211,575
Unit net return (TS/ha)	460,094	632,772	301,300	1,108,193
Net return rate (%)	69.9%	61.5%	34.6%	87.4%
Unit operational cost (TS/ha)	178,335	334,268	198,401	140,146
Unit operational cost (TS/kg)	49	81	112	35
No of household interviewed	76	45	64	119



## Realizing the importance of Irrigated Rice Cultivation

By *Mitsuhiko OJA\**

It is said that macro economic conditions now have been improving, while on the contrary, differences between the rich and poor, and that of the urban and rural has been expanding. This resulted in 60% of rural population and 10% of the urban population to suffer from absolute poverty.

Under such circumstances, agricultural sector of Tanzania is one of the most important sectors which accounts for around 45% of GDP and 80% of employment. Ministry of Agriculture and Food Security (MAFS) has set food security and poverty alleviation as a main pillar of its agricultural development policy.

Agricultural production environment is still weak in both hardware and software aspects, such as irrigation facilities, farm road and farmers' cultivation techniques, extension & training services, in spite of efforts Government has made.

Most of the country is classified as semi-arid area with 400 – 700mm of annual mean precipitation, except Dar es Salaam and some mountainous areas. Therefore, crop production is quite unstable, greatly affected by rainfall fluctuation. From the current population the annual food demand is estimated at 4-5 millions tons.

There is no doubt that stabilizing and improving productivity of maize as a main food crop, however, small-scale subsistence farmers may face some difficulties in access to rather big investment for water, fertilizer, chemicals, etc.

While, rice is the second major food crop in this country, and only 500,000 tons is annually produced, which can feed approximately 5 - 6 million people, which is equivalent to about one fifth of the national population.

KATC II project aims at improving rice productivity through trainings and it is



An Intermediate farmer in Mombo model scheme sawing paddy bags after harvesting ready for transportation

KATC dream that through this trainings the farmers in the schemes, which we are working with, can double the yield and in the long run rice can be one of the most important cash crops for small holder farmers in Tanzania. This can be a very big contribution to both food security and poverty alleviation in Tanzania. Therefore, let us work for improvement of irrigated rice farming for betterment of smallholder farmers in Tanzania.

## Gender-specific training ~ Report from the site

By *Ms. Enoki\*\*, D.N. Uhwelo\*\*\* and J. Mshanga\*\*\**

May be it is high time now for all KATC II stakeholders to ask themselves the following questions. What kind of changes will be likely to occur in the household after new techniques on rice cultivation are introduced by KATC II project and applied to the field by the farmers?

Is there any possibility that the change in techniques distorts the division of labor between male and female at home?

Is it likely for only male to receive the financial benefits as the income of household increases in accordance with the increase in productivity?

Obvious answers for all those questions should have gender sensitivity so as to



Planning for income and expenditure exercise by farmers themselves

cater for the whole family affairs.

With regard to KATC II project trainings; gender specific trainings are now being delivered to farmers in all model schemes. The training includes introduction of improved wood stoves, called 'Ukombozi jiko' as well as basic family budgeting training so that the members of households could understand the importance of discussing their incomes and expenditure for a year together.

### 1. Ukombozi jiko (improved stove)

In one of our model sites, Nduguti, Shinyanga, women leave home at 6 am and walk about 20 km to the next district for firewood. They fetch firewood and return home at around 5 pm. Because of very long distance, men sometimes help women to collect firewood the other day by an ox cart. Collecting firewood is a very heavy burden both for men and women.

KATC's jiko is user-friendly – using locally available soil and materials and easy to make and it consumes only 1/3 of firewood needed by traditional 3-stone stove. In Mwamapuli, 10 farmers have already started making KATC jiko!

### 2. Basic family budgeting

Most of the farmers do not know how



Farmers making ukombozi stove during training

much they earn and spend for a year. Some of them cannot properly plan and manage the family budget and fail to secure the money for even basic expenditures such as food, clothes and education as well as agricultural inputs for the next season.

KATC II's family budgeting training takes enough consideration on gender by using candies so that people with handicap in writing and reading (female has disadvantage in most cases) are able to digest the idea of family budgeting by moving candies and by seeing the bulkiness of candies in an exercise sheet. The participants are expected to do what they learned at home.

## KATC TRAINING.....WONDERFULL

*By Hanif J. Nzully*

On 1<sup>ST</sup> to 6<sup>TH</sup> November, 2004 KATC II project conducted a five days training on rice production in South West Kano Irrigation project in Kenya under Regional Technical Cooperation Promotion Project (RTCPP). During the official opening of the training the Kisumu district crops Officer Mrs. Seline Bonyo who happen to be the guest of honor thanked the 13 Key farmers who had previously attended a detailed Rice Production training at KATC in 2003 and through them 130 farmers have been able to attend the third infield training.

She also appreciated the efforts of JICA in collaboration with KATC in facilitating the worthy course to SWK farmers. She said the

courses being carried out are in line with their policy of Production of pluralism in extension provision as spelt out in NAEP, Nalep-IF and SRA.

She further commented that, in the current extension Programme (NALEP) Promotion of viable, market-oriented opportunities is paramount and believes rice is such a crop that can ensure food security and provide money in the farmers' pockets (coffers).

The guest of honor provided a statistical data in order to explain the status of rice which showed the production trend as from year 2000 to 2004 for Kisumu district.

According to the depicted statistics it is quite clear that rice production has declined over the years. This is attributed to the problems that have



The guest of honor addressing farmers during the opening of the training at Withur

- Lack and/or inadequate use of farm inputs
- Low production per unit area. Out of a potential of 75 bags /ha: Many farmers are only able to produce 45 bags /ha which is less by 30 bags from the projected potential.
- Poor rice seeds due to lack of certified seeds.

The mentioned problems as well as other production factors contribute a lot to poor yields per unit area.

It is in this respect that we very much appreciate the technologies that are associated with this training: they will definitely address our key problems and ultimately increase yields per unit area while reducing the cost of production hence increased profits from rice production, commented the

STATUS OF RICE IN KISUMU DISTRICT.				
Production trend from 2000-2004				
Year	Targeted	Achievement	Production	Value (Kshs).
2000	918	352.75	-	-
2001	1400	846	50,760bags	50,760.00
2002	1578	527	31,620bags	31,620.00
2003	3010	536	32,160bags	38,592.00
2004	1685	-	93,300bags	

***This training will definitely address our key problems and ultimately increase yields per unit area while reducing the cost of production hence increased profits from rice production***

been associated with rice production in both Nyando and Kisumu districts and more so the closure of Nairobi market and lack of water have contributed immensely to this production trend.

To add on that, the guest of honor outlined several problems that are associated with rice production in the area. The problems include poor management of the fields in terms of

- Water management- inadequate supply to the rice fields.



Key and Intermediate farmers getting explanations before caring out measurements of yield components of paddy at Siany Irrigation Scheme



A Key farmer at Arombo Irrigation Scheme showing his line transplanted plot



South West Kano farmers in a group discussion session during the training

She pin pointed some of the technologies that are associated with RTCP training on rice production. Such technologies include:

- Line planting that results to increase in tillering, reduce cost of weeding. Hence increase production/unit area.
- Use of push weeder that reduce the man days for weeding. She was also happy to know that some of their artisans have already been trained on this and they will be able to fabricate the very important implements to assist



South West Kano farmers during a field day at Siany Irrigation Scheme

farmers.

- Selection of seeds using water and salt will ensure good germination and strong and healthy seedlings.

The guest of honor urged the farmers to make sure that the knowledge received is implemented on their farms and wished to see many other farms similar to the demonstration plots in Siany Irrigation Schemes. She also asked farmers to disseminate the knowledge and skills gained in other smallholder schemes.

However in order to tackle the issue of farm inputs which is crucial in the area to most farmers, the guest of honor commented that through a micro finance institution such as RECA farmers can get credit to purchase inputs to improve



Farmers enjoying threshing paddy by using a KATC fabricated threshing stand

their productivity.

She also told the farmers to move with the world trend where organic products are now on high demand. Farmers should therefore; hope one day shall be able to produce organic rice once they became food secured. They can then sell their rice to other countries at a premium price. This should be their overall goal because currently their markets are full of Tanzania, Pakistan and India rice.

## A GOOD IDEA NEVER DIES

*By Dennis Wambura - Extension Officer - South West Kano Irrigation Project*

The idea of line transplanting and application of other improved rice cultivation techniques such as mechanical weeding have long story in our SWK scheme, a lot of efforts were paid to our farmers by researchers and extension officers through demonstration and trials, but farmers went back to practice random transplanting.

Why this happened the idea originated from top and commanded to farmers to perform it. Demo plots were in Extension officers plot therefore farmers couldn't see any importance of following the skill taught to them; thinking that the plot and all skills were for Extension staff. Aim of extension officers was to enable them to produce more, but the approach used was not conducive enough to convince farmers to adopt the techniques.

The idea became true when the same techniques were provided to farmers using different approach "grass root approach" allowing farmers to think what they need and why they select it and how to implement it in their fields in combination with visiting to various schemes where

they can exchange views with their host farmers, through discussion with their colleagues who are of the same class with them, convince them to practice the idea brought in front of them. Farmer to be given a role of recruiting other farmers through formation of learning groups and demonstrations show positive reaction to majority of farmers. Extension officer and other concerned officials act as facilitators of the sessions. This idea was simply called "farmer to farmer extension".

Trained farmer was re-named as Key- farmer this one has been given a role of recruiting and training some farmers who were named intermediate farmers. Other farmers remained were trained by both Key and Intermediate farmers. Extension officer become a facilitator to facilitate the whole process. Objective of this approach was to enable all farmers to become competent and more responsible in producing rice using recommended skills.

Do you know were this idea come from? Yes KATC

We learnt that when a farmer learn a certain skill it be-

come very easy for him/her to train his/her friend and the chain goes like this until the whole group if not a scheme at large is aware of the skills.

Therefore the idea which was introduced by our staff has been activated and applied again by using different approach, of which its fruits are well seen in our scheme. Adoption of the technologies is high and yield has increased within one season. It is my hope that training will continue

Thank both instructors from our scheme and KATC. **Long live KATC!!!!**



KATC tutors observing a key farmer's plot at Arombo Irrigation Scheme

## KATC Participates in SADC Agricultural show

*By R.J. Shayo, Mary Mlika & N. Shauritanga*

On 9<sup>th</sup> May 2004, Tanzania hosted and chaired an extra ordinary SADC meeting held at Golden Tulip Hotel in Dar- Es - Salaam. The main message was "Food Security for SADC Countries."

To make this event colorful, the Tanzania Government organized a one week agricultural

show in the hotel premises from 9<sup>th</sup> to 15<sup>th</sup> May 2004.

Kilimanjaro Agricultural Training Centre (KATC) participated in this show after being nominated and given a special invitation by Ministry of Agriculture and Food Security. Despite the limited preparation time, KATC was among the best institutes due to the fact that it was the only place where visitors could see the activities related to the message (moto) of the meeting.

Ministers, Principal Secretaries, SADC officers at different capacities, got information and witnessed on the simple technologies and techniques which can easily improve small holder farmers' production from subsistence farming into a scientific commercial one.

The meeting also emphasized on irrigated farming as the only strategy to deal with the drought threatening the lives of millions of people in the SADC countries. The visitors appreciated that KATC is an institute of its own kind in the African region, trying to address food insecurity problem through training.

Zambia and Malawi officials admired to hear that KATC is conducting farmers training at Sefula (Zambia) and Bwanje Valley



The Minister for Foreign Affairs Hon. Jakaya Kikwete (center) listening to explanation from KATC Principal Mr. R.J. Shayo



The Minister for Agriculture and Food Security in a tie, Hon. Keenja commenting something to KATC Principal Mr. R.J. Shayo



The Minister for Trade and Industries Hon. Dr. Juma Ngasongwa (with a file) also had opportunity to visit KATC pavilion



KATC Principal Mr. R.J. Shayo in an interview with ITV reporter.

## NEW JAPANESE EXPERTS JOIN KATC

*By Hanif J. Nzully*

As KATC phase II project is midway, some of the experts were also concluding their terms of service and therefore giving way to new ones to join the project move.

Mr. Hiromu UNO was one of the experts for the Water Management section that his term of service ended in mid May after being at KATC for about two and half years. Mr.



The Director of Training In The Ministry of Agriculture and Food Security Mr. R.S.Kapande confers a certificate to Mr. Hiromu Uno.

UNO was a hard working expert who has used most of his time here at KATC for the betterment of the project and model schemes in particular. At the end of his term Mr. R.J. Kapande on behalf of the Permanent secretary for the Ministry of Agriculture and Food Security conferred a certificate of appreciation as well as testimonial for his good service rendered. In turn Mr. INOUE who is an irrigation engineer was welcomed to KATC as a new ex-



The out going Chief Advisor for KATC II Project Mr. Yamada (center) being flanked by the incoming Chief Advisor Mr. Ota (left) and Mr. Inoue-new expert for Water Management section (right) during the farewell and welcoming party held at KATC grounds

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pert for the Water Management section. Other experts were Mr. ONISHI and Mr. KODA who were replaced by Mr. ASAI and Mr. YAMADA respectively. Recently Mr. YAMADA had to terminate his contract and Mr. OTA took his



The new Chief Advisor for KATC II Project Mr. Ota addressing KATC



KATC Principal Mr. R.J. Shayo and the former Chief Advisor Mr. Koda dancing with other KATC members of staff during a farewell part at KATC grounds.



Mr. Yamada waving to KATC staff

The outgoing Project Coordinator for KATC II Mr. Onishi (left) and the incoming Project Coordinator Mr. Asai during the farewell and welcoming party held at KATC grounds



## LETTERS FROM SOUTHWEST KANO AND DOHO FARMERS



It is my pleasure to write to you this letter with a lot of confidence and dili-

gence hoping that you are fine in the name of Almighty God.

The main reason why I have decided to take this chance and write this letter is to thank you all for the teachings which you taught us since 1<sup>st</sup> to 5<sup>th</sup> November 2004, because it has made a great change since that day.

You have made us to know how to plant paddy, time for cultivating and cropping, time for harvesting and season of great financial demands also you have taught us how to plan for family budget. I would also like to thank you again for teaching us a new method of threshing rice and a method of making threshing stand. And know we are able to know that the owner of the paddy is the manager.

We are also happy for the teachings which you taught us during field day. May God bless you and till we meet again and please try to prepare for another seminar. We are happy for making a great chance.

Yours faithfully,  
Elizabeth A. Agalloh  
Intermediate farmer  
SOUTH WEST KANO- KENYA



To all agricultural instructors of the Centre, those support staff from the

Ministry of Agriculture, Kenya, JICA and all those who made the workshop/workshops a success; I wish you all the best.

Firstly, I thank you all for the technical know how I gathered from your harmonious instructions and the handouts which were in themselves very instructive.

Secondly, I as a rice farmer was able to double my harvest from a mere 14 bags per  $\frac{3}{4}$  acre to over 24 bags from your practical instructions. I was not aware that line planting is economical and labour saving.

Initially, I was using over 10 kg of seedlings on the same plot, but with your instructions, I used a mere 3 kg. Push weeder is easy to use and money saving. The threshing stand is economical in all aspects, I thank you for that knowledge.

Lastly, I would be glad further if you will introduce an assessment practical test for the participants for the award of participants certificate.

Faithfully Yours,  
Alfred O. Ajwang  
Intermediate farmer  
NYAKALEWA SCHEME  
SOUTH WEST KANO- KENYA

TO THE PRINCIPAL AND STAFF  
Kilimanjaro Agricultural Training  
Centre  
P. o. box 1241  
Moshi.  
TANZANIA.

With the highest esteem, I have the pleasure to write to you. The main aim being appreciation of your services rendered to us ever since we joined you through the RTCPP.

All the tutors you send us for the infield trainings are really doing a commendable job. Evidence here is that many farmers have changed and their yields are improving. This is as a result of the knowledge we are getting.

After the first training, we thought of a goal which is; **TO GET 1500 KG OF MILLED RICE PER ACRE BY THE YEAR 2005.** Right now every farmer is working towards this and when achieved, **Doho will be JAPAN OF Uganda.**

May the Lord bless you all as you continue giving us services.

All from

Nabuhalya, Catherine  
KEY FARMER DOHO RICE SCHEME  
P.O. BOX 518  
MBALE -UGANDA.

# ABOUT KILIMANJARO AGRICULTURAL TRAINING CENTRE (KATC)

## BACKGROUND

Kilimanjaro Agricultural Training Centre (KATC) is one of the centres under the Ministry of Agriculture and Co-operatives offering specialized short courses in agriculture, with special emphasis on irrigated rice fanning. The Centre aims at strengthening the technical capability of extension personnel and key fanners with respect to irrigated rice farming through training.

Great efforts have been made by the Tanzanian Government with assistance from the Government of Japan to set up magnificent training facilities at KATC Moshi for rice for farmers and field personnel. The Centre is well equipped and staffed with (qualified and experienced trainers



A key farmer being proud of the implementation of the training in her own farm

## COURSES OFFERED AT KATC

KATC offers two types of courses; regular and tailor made courses. The courses target the major rice growing areas. These includes:

- Rice Cultivation Course for Extension Officers
- Water Management Course for Irrigation Technicians
- Key-farmers Courses for rice growing farmers:
- Rice Mechanization Course for Mechanization Officers
- Tractor Operator's Course
- Farming Tools Fabrication Course for Farmers and Extension Officers.



Building a sense of ownership of irrigation schemes. Farmers both men and women participate fully in renovating irrigation infrastructures.

in the fields of irrigated rice cultivation, water management, rice mechanization and agricultural extension services. The Ministry of

Agriculture and Food Security recognizes KATC as the centre of excellence in these fields and would like to see it being fully utilized by both government and non-government institutions and the general public.

## FACILITIES

KATC's capacity to run residential courses is currently sixty (60) participants at a time. The facilities at KATC Chekereni compound include:

- Two hostels with 30 spacious rooms combined with dining and kitchen facilities
- Well equipped lecture rooms and laboratories
- A library and reading room with most up to date literature on irrigated rice cultivation
- A well equipped audio-visual materials production unit
- Secretarial and printing services which include binding.
- A training machinery workshop
- An animal power unit with trained water buffaloes, oxen and ducks



Just like gold mining, you bend to put the technique working so as to reap well

- A training farm for practical demonstrations
- A well equipped meteorological station
- A post harvest facility

## TRAINING METHODS

A range of participative training methods are used for more efficient training and learning. Such methods are:

- Presentation methods (lecture, demonstration)
- Interactive methods (discussion, role play)
- Exploratory methods (exercises, case studies)

The participants, among themselves and the trainers, will share individual experiences within the total collective strength of the learning group and the facilitating team.

Approximately 30% of the learning time will be devoted to classroom lectures and group discussions and 70% to exercises, field studies,

**KATC MOTTO**  
**FOOD SECURITY FOR THE NATION**



New technologies are introduced to save time and simplify work



Pointing to the success as the dreams comes true

Tailor made courses are usually organized on request and are designed to meet customers' stated needs.