

KIRAN NEWSLETTER

Know, Share, Grow

ICAR Research Complex for NEH Region, Umiam, Umroi Road, Meghalaya – 793103

Email: mediacell4icarneh@gmail.com, Contact: 094021- 34177



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ABOUT KIRAN NEWSLETTER

KIRAN Newsletter is an initiative with the motive to accomplish the mandate of project KIRAN in terms of its ICT based extension services towards various agricultural stakeholders of North Eastern India in fulfilling its concept “Know, Share, Grow”. The flow of information and knowledge from different sources that accumulated in KIRAN database remained almost static. There was less dissemination to the desired targeted-stakeholder on account of some inescapable circumstances. In order to bridge the gap, the first step taken by the team is to transform the static nature of information being confined in the portal to a dynamic flow in the form of newsletter. The newsletter will enhance the sharing of information for the growth of knowledge at large whereby widening its outreach. In addition to the default information received through KIRAN portal, other form of information under the domain of agriculture from around the corner especially from the region are gathered to publish in the newsletter. At present, the format is made up of two sections, the news and research-based article from experts. News/articles/information may be sent to mediacell4icarneh@gmail.com in the prescribed format before 25th of every month. To subscribe, kindly go to <http://kiran.nic.in/Newsletter.html>

Director's Message

On behalf of the institute I congratulate team KIRAN on the successful launch of the “**Newsletter**”. Rising against all odds the team has proven that “a kite rises against the wind, not with the wind” and that “inventions are not accidents they are the rewards for unceasing efforts” it is well apt to the efforts put in where there is one percent inspiration and 99% perspiration. The institute has produced wonderful technologies various products for the benefit of the hilly people. North East India is a colourful canvas of the country and the diversity and the rich tradition is unique and the specialty of the region.



The region is bestowed with immense natural resource which needs to be tapped and utilized for the benefit of the people of the region. Agriculture is the culture of the region and the institute needs to focus of the prime task of bringing youth back to agriculture. Use of information technology is the need of the hour for a developed society and KIRAN is an apt example of the right use of technology. The information portal suffices to all the technical needs of the farmers to enhance their knowledge and skill to reap better rewards. Wish the team all the success and hope that the efforts taken will bring immense success to the famers and the team behind it.

N. Prakash, Director

RELEASING SOON !!

AUDIO VISUAL NEWS !

An initiative to mark the 7th Anniversary of KIRAN. Wait and Watch !!!





91st ICAR Foundation Day and Award Ceremony

91st ICAR Foundation Day and Award Ceremony held

"Being agriculture-centric, the farmers are the assets of our country", said Shri Narendra Singh Tomar, Union Minister of Agriculture and Farmers Welfare & President of the ICAR Society. Shri Tomar was addressing as the Chief Guest during the 91st Foundation Day celebrations of ICAR held at the National Agricultural Science Centre Complex, New Delhi on 16th July 2019. The farmers play a pivotal role in the society as they are the real lifelines of the country, he added. He stated that the welfare of the agricultural and farming community is one of the foremost aims of the government. The Minister applauded the role of ICAR in ensuring the food security in the country. Shri Tomar urged to contribute to realize the Honorable Prime Minister's aim and vision of doubling the farmers' income by the Year - 2022. He highlighted the various schemes of the government that are aimed for the benefits of the agricultural and farming community. He said that there should be a collective approach to develop techniques to overcome various problems faced by agricultural community more effectively and efficiently. The Minister emphasized that more and more youths should be encouraged to take up the agriculture as their profession.

The Minister released the "Kisan App" and various publications on the occasion. Shri Parshottam Rupala, Union Minister of State for Agriculture & Farmers Welfare; Shri Kailash Choudhary, Union Minister of State for Agriculture & Farmers Welfare and Shri B.D. Sharma, Member of Parliament also graced the occasion. Dr. Trilochan Mohapatra, Secretary (DARE) and DG (ICAR) made a comprehensive presentation on the recent achievements of ICAR. He urged to prepare the future roadmap and underlined about the ICAR's collaboration with the different national and international organizations in the forms of Memorandums of Understanding. Earlier, Shri Bimbardhar Pradhan, Additional Secretary & Financial Advisor (DARE/ICAR) delivered the welcome address. He regarded the Foundation Day as the day to present a brief account of all the works done and advances made in the fields of agriculture, farming and allied sciences during the whole year. The ICAR Awards were conferred to 167 awardees under 22 different categories.

7th ANNIVERSARY OF KIRAN CELEBRATED

The journey of KIRAN began on the 16th of July 2012, which coincides with ICAR's Foundation Day. The 7th Anniversary celebration was started with a short programme at the Computer lab of the ICAR Research Complex for NEH Region by a speech from the team leader with words of inspiration and encouragement to keep the spirit of teamwork in achieving the goal of KIRAN set by the founders 7 years back reminding that KIRAN was launched with a motive to bring a change with the use of agricultural technologies of recent advances under the umbrella of IT. KIRAN is a user platform instrumental in harnessing the power of scientific knowledge and innovation for strengthening agricultural production system in NE Region through dynamic partnership and convergence among the diverse stake holders.

During the lunch break a brain storming session was also held among the members to earmark the mandate of KIRAN in all future plan of action. The session end up with an action plan to take up long term and short term activities in order to achieve the targeted goals which includes publishing of monthly newsletters, audio visual news, e-marketing App, ICT based extension programmes, multi lingual SMS services, updating of portal contents, on field farmers awareness programmes, convergence of existing projects activities under one platform of KIRAN etc.

It was also decided by the members to collaborate with Media Cell and AKMU of ICAR RC for NEHR so that all the activities targeted can be achieved with maximum and fruitful results. The proceeding of the meeting included to organize a brain storming hour with all the directors of NARS institutes of NE region along with HODs of the ICAR RC for NEHR to sort out a solution related with the communication gap between stakeholders and experts.

ANIMAL HEALTH CAMP AT SAGO AND SADI VILLAGE OF LEPPARADA DISTRICT OF ARUNACHAL PRADESH

A day long Animal health camp was conducted at Sago and Sadi village of Lepparada district of Arunachal Pradesh. The programme was organized by ICAR AP centre, Basar under the direction of Dr. H. Kalita, Joint Director, ICAR AP centre, Basar which was funded under TSP (Tribal Sub Plan). Coordinator of the programme was Dr. Doni Jini, Scientist (Vet. extension education) along with Dr. T. Borah, Livetsock manager and Dr. B. Yomgam (T-4), Animal science. During the health camp 70 mithuns, 15 cattle and 350 birds of 3-5 days old were vaccinated for FMD and RD disease. Some sick animals were also treated and farmer's door to door visit was conducted. After the health camp, veterinary medicines like vitamins, mineral mixture and first aid items were distributed to the livestock and poultry farmers. The farmers appreciated the effort done by the team from the centre and requested for such camp again during winter season.

REPORT ON FARMERS' AWARENESS PROGRAMME ON AGRO-MET ADVISORY SERVICES, 2018-19

A day long Farmers Awareness Programme on Agromet Advisories Services" was organised by DAMU project under KVK Namsai at KVK Office Namsai, Arunachal Pradesh. The programme was attended by a total number of 118 participants involving State Agriculture and Allied Department officials and progressive farmers from different block of the district. The programme was chaired by Prof. V.K. Kawatra, Vice Chancellor, AAU, Shri J.K. Jawal, ADF, and Dr. R.D. Jindal, DVO Govt. of Arunachal Pradesh, as Guests of Honour, Dr. H. Kalita, Joint Director, AP, Centre Basar, Dr. Manish Kanwat were among the dignitaries. The programme was successfully conducted with active participation from different district level officers from agriculture, horticulture, fisheries and veterinary departments of govt. of Arunachal Pradesh. Dr. G.T. Behere, Pr. Scientist and head, division of crop protection, ICAR-RC NEH Region, Umiam, Meghalaya and Dr. Ampee Tasung, Scientist, Soil science, ICAR RC NEH Region Basar also attended the programme.

TRAINING PROGRAMME HELD ON "FODDER PRODUCTION" UNDER NICRA

KVK West Garo Hills Meghalaya organised a one day training programme on "Fodder Production" in Rimrangpara village under NICRA project. 22 participants were taught about the different types of fodder grasses and trees that can be grown in the village. Emphasis was given to establish fodder banks in the villages to help the farmers during scarcity period. Participants were taught about the cultivation methods of different types of perennial fodder grasses like Para, Guinea, Hybrid Napier, Congosignal, and Stylosanthes and trees like Subabul and Bauhinia.

KVK RI BHOI CELEBRATES 19TH NATIONAL FISH FARMERS DAY

Krishi Vigyan Kendra Ri Bhoi under ICAR Research Complex for NEH Region Umiam along with the rest of the country celebrated the National Fish Farmers' Day on the 10th July 2019 at Pahambirthem Village, Nongpoh. The day is commemorated in remembrance of scientists Dr K. H. Alikunhi and Dr. H.L. Choudhury who had invented induced breeding technology on this day way back in 1957. Around 20 fish farmers from the village were present at the event. During the program fish fingerlings of Amur carsps were also distributed to the fish farmers.

FARMERS SENSITIZATION PROGRAMME ON CITRUS DECLINE

A day long Farmers sensitization programme on citrus decline was organized by KVK Namsai ICAR, Arunachal Pradesh Centre. . 100 farmers attended the programme successfully and took the pledge to make the circle and district as landmark in orange production. Different farmers scheme were also highlighted during the programme to ensure better income for the producers. Farmers asked several queries about citrus, production, marketing, processing and others important issues with KVK scientists, officers from Agriculture department and Horticulture experts during farmer - scientist interaction.

VAN MAHOTSAV- THE FESTIVAL OF LIFE

Van Mahotsav day also known as the festival of life was observed by ICAR Research Complex for NEH region, on the 6th July, 2019 in the villages adopted under "Farmers' FIRST project". The program was held in the FFP clusters villages comprising Nalapara, Umtham, Joigang, Purangang, Sarikushi, Borkashari villages. Van Mahotsav is a festival which originated in the 1950s initiated by the then and first Union Minister for Agriculture Shri. K. M. Munshi to foster a sense of environmental responsibility among the citizens and to combat deforestation. With this in mind, many people from all walks of life take part in this festival by planting or sowing seeds of trees. Farmers in the Ri-Bhoi district have one of the most fertile areas in the Northeastern Hill region but it should be utilized in the right way, in contrast to commercial farming with profit as a source of motivation which ultimately leads to land degradation. The integration of Agroforestry systems in cereal and commercial crops is possible to create sustainability, diversity with a focus on maximum land utilization and income generation .Dr. R. Laha, Principal Scientist & P.I. of the project thanked Dr. J.J. Rajappa, Scientist for organizing the the programme and farmers and other staff of ICAR for celebrating Van Mahatsav Festival. He stressed on monitoring of the planted trees from time to time. The saplings of different agro-forestry plants species such as treebean (Parkiaroburghii), bottlebrush (CallistemonSpp.), khasi mandarin and Poma (Chukrassiatubularis) were distributed to the farmers present and these saplings were then planted in and around the farm lands of farmers in the ten adopted villages under Farmers' FIRST project in Ri-Bhoi district of Meghalaya. The efforts of ICAR was a small step in its afforestation but it serves as a leap in creating awareness in the minds of the people regarding conservation of forests and afforestation.



AWARENESS AND SENSITIZATION PROGRAMME ON PROMOTION OF ICT BASED EXTENSION BY KIRAN TEAM

The KIRAN team has been invited to conduct an awareness and sensitization programme on promotion of ICT based extension as part of the celebration of the first Anniversary of Synroplang Village Organization, Open Defecation Free recognition village, 2019 and the 184th Death Anniversary of U Tirot Sing Syiem, the freedom fighter of the land organized by the Dorbar Shnong Umsohlait village held on the 17th July, 2019 at Umsohlait Parish Hall.

On this day Shri Charles Marngar (Local MDC, Mawhati Constituency) graced the function as the Chief Guest and other dignitaries present in the occasion included the Parish Priests of Umsohlait Parish and some elders of the village. The awareness programmed was chaired by the Village Headman; Mr. LekiSuchiang with an introduction of the Team led by Dr. Uttam Singh, Scientist and threw some light about KIRAN and its relation with ICAR, Umiam. The awareness programme began with an introductory note about KIRAN and its function and also briefs of the role of ICT and its importance in daily life of the people to uplift their socio economic status were an integral part of the programme. Ms. Caressa Thabah shared a step by step procedure about the registration of the farmers and agripreneurs with KIRAN so that they can receive a daily free SMS related with the farming system or practice and agro -met advisory. She also shared some information about the KIRAN website and its mobile application and the uses of the advisory uploaded in the App. Mr. Kyrshan Rynjah shared a presentation about the role and function of the Farmers Producers group and the importance of e-marketing for the entrepreneurs and the Self Help Group ready to market products. After the session, there was an interaction with the farmers and stakeholders attending the programme and thus ended successfully by the handing over of some farmers related leaflet/pamphlets to the Headman for record keeping and for the benefit the of the farmers in general.

AWARENESS CUM SEED DISTRIBUTION PROGRAM ORGANISED

Under SCSP (Scheduled Caste Sub Plan) project on "Empowering small and marginal farmers through location specific integrated farming system" a capacity building programme on high yielding rice cultivation was organized in Chandranagar, Tripura on the 26th of June. Dr. Anup Das, Principal Scientist (Agronomy) and Dr. G.S. Yadav, Scientist, Agronomy interacted with the farmers about high yielding paddy cultivation. . Seeds of high yielding rice variety Gomati were distributed to the schedule caste farmers. The scientists also discussed about the integrated farming system, farm diversification, importance of livestock, vermin-composting, soil health card etc. to improve livelihood of farmers. Women farmers were also motivated to take keen interest in SCSP project for their betterment.



ICAR-KVK East Sikkim confers Pt. Deen Dayal Upadhyay
Rashtriya Krishi Vigyan Protshahan Puraskar - 2018



ICAR-KVK Churachandpur launched Capacity
Building and Distribution programme

FOODGRAIN PRODUCTION STATUS IN NEH REGION

- N. Uttam Singh

Referring Fig 1, considering the Triennium Ending (TE) figures of area, production and yield of foodgrains from TE 1975 to TE 2015 in the states of NER, on an average, no doubt Assam registered the highest area and production under foodgrain followed by Tripura, Manipur, Nagaland, Arunachal Pradesh, Meghalaya while Mizoram and Sikkim have shown the least area and production under foodgrain. When yield is considered, on an average Manipur ranked first followed by Tripura and Meghalaya while lowest yield was observed in Arunachal Pradesh and Nagaland as per the studied triennium figures. Though fluctuations were shown by few states in the studied triennium endings, gradual increment in area, production and yield were observed in NER.



Figure 1: Triennium ending area, production and yield of foodgrain in NER for TE 1974-75, TE 1984-85, TE 1994-95, TE 2004-05 and TE 2014-15.

Growth rate of area, production and yield of foodgrain:

Referring Table 1, temporal analysis of five decades (1966-67 to 2014-15) reveals that growth rate performance of foodgrain in the region, among the five decades, decade 1 (1966-67 to 1974-75) has achieved the highest growth in area followed by decade 3 (1985-86 to 1994-95). Lowest growth in area has been observed in decade 4 (1995-96 to 2004-05) followed by decade 2 (1975-76 to 1984-85). Highest significant growth in production and yield have been achieved by decade 5 (2005-06 to 2014-15) followed by decade 3. Lowest growth in production and yield have been observed in decade 2 followed by decade 4 in production and decade 1 in yield. On an average, decade 5 (2005-06 to 2014-15) may be regarded as the best performer in the growth of foodgrain among the five study decades. In the entire period the growth performance of yield of all the states reveals highly significantly accelerating except in Mizoram and Tripura. On an average among the states Nagaland registered the highest significant growth in area (3.73%) production (7.03%) and yield (3.19%) followed by Arunachal Pradesh. In the entire period all the states witness positive and almost significant figures in area except Sikkim and Tripura while Production and yield growth are all positive and almost significant in all the states.

Editor - in - Chief

Dr. Aramb Sen

Editor

Dr. N. Uttam Singh

Layout & Compiled By

Team KIRAN in collaboration with Media Cell & AKMU

Published By:-

Director,

ICAR Research Complex for NEH Region, Umiam, Meghalaya -793103

State	AR	AS	MN	ML	MZ	NL	SK	TR	NER	India
Period 1: 1966-67 to 1974-75										
AREA	3.7	0.3	0.9	0.9	38.9	-9.1	NA	2.3***	1.2	0.5
PRDN	3.4	1.4	-2.0	0.9	29.4	1.2	NA	6.0	2.6	2.7
YIELD	-0.2	1.1	-2.9	0.0	-6.8	11.3	NA	3.6	1.4	2.2
Period 2: 1975-76 to 1984-85										
AREA	5.2	0.9	-1.4	1.2	-27.8**	-15.3*	5.9	-0.9	0.6	0.1
PRDN	6.9**	2.0	-0.5	1.7*	-24.3**	-16.2*	13.3	1.0	1.8	2.6
YIELD	1.6	1.1	0.9	0.6	4.9	-1.0	6.9	1.9	1.2	2.5
Period 3: 1985-86 to 1994-95										
AREA	2.8	0.9	-0.9	-0.8**	18.4	13.5	-0.6	-0.3	1.2**	0.1
PRDN	1.3	3.4	3.6	0.0	25.1	22.2	0.9	2.1	3.6**	3.3**
YIELD	-1.5	2.5	4.5	0.8	5.7***	7.6*	1.4	2.4	2.4*	3.2**
Period 4: 1995-96 to 2004-05										
AREA	0.9	-0.4	0.7	0.4	-1.9	3.9***	-1.0	-0.3	0.0	-0.8
PRDN	2.0	1.2	1.4	4.7**	0.1	8.1*	-0.6	4.3	1.9	0.4
YIELD	1.1	1.5	0.7	4.3**	2.0	4.2	0.5	4.6	1.9**	1.3
Period 5: 2005-06 to 2014-15										
AREA	0.9*	1.0	5.4	0.8**	-7.4	1.3	-2.0	1.0	1.1	0.1
PRDN	6.9**	6.0**	1.8	5.6**	0.8	5.2	-0.1	3.0**	5.2**	2.5*
YIELD	6.0**	5.0**	-3.4	4.9**	8.1	3.8	2.0**	2.0**	4.1***	2.3**
Entire Period: 1966-67 to 2014-15										
AREA	2.9***	0.4***	0.5	0.2*	1.7***	3.7**	-0.5	-0.22	0.7***	-0.0
PRDN	4.1***	2.0***	1.6***	1.9***	2.9	7.0***	0.6	2.4	2.3***	2.3**
YIELD	1.2***	1.5***	1.1**	1.7***	1.7	3.2***	1.1***	2.6	1.6***	2.3**

Table 1: Compound growth rate of area, production and yield of foodgrain in the states of NER during the decades 1966-67 to 1974-75, 1975-76 to 1984-85, 1985-86 to 1994-95, 1995-96 to 2004-05 and 2005-06 to 2014-15 and overall period 1966-67 to 2014-15.

Relative contribution of area, productivity and their interaction to the change of production growth:

The decomposition analysis has revealed that relative contribution of yield effect (54%) to the change of output growth is more than that of area effect (20%) and interaction effect (26%) for the region during the decade from 1975-76 to 2014-15. Hence production in the region has increased as a result of yield improvements followed by area expansion. In all the five decades as well as the entire period yield has more between variations than within variation.

Instability analysis in area production and yield of foodgrain:

Referring figure 2, among the states Mizoram followed by Nagaland registered comparatively highly instable in area, production and yield in all the periods while Sikkim, Meghalaya and Assam were found comparatively more stable. Arunachal Pradesh, Manipur and Tripura were lying somewhere in between the two situations.

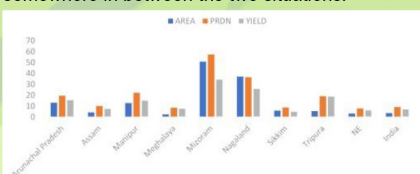


Figure 2: State wise instability index of area, PRODUCTION and Yield of foodgrain during the entire period, 1966-67 to 2014-15.

Variation of yield of foodgrain:

Referring Fig 3, overall variation of yield across the individual states over each decade of years is quite less than that of the between variation as the within variation is comparatively lower. This indicates the existence of identifiable state specific factors that causes the variation in a large scale. These state specific factors are becoming more specific over the decades from 1 to 5 resulting the variability larger among the states in the course of time. The probable state specific factors may be government policies, agriculture input technologies,

topography, soil fertility, natural resources, agriculture functionaries, etc.

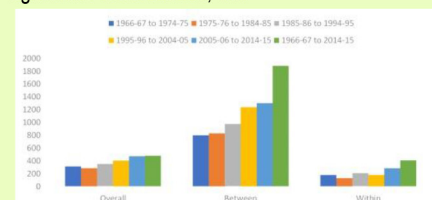


Fig. 3: Overall, between and within variation of food-grains-yield during the decades 1966-67 to 1974-75, 1975-76 to 1984-85, 1985-86 to 1994-95, 1995-96 to 2004-05 and 2005-06 to 2014-15 and entire period 1966-67 to 2014-15.

Requirement of foodgrain in future in the region:

In 2021 total requirement of foodgrain in NER will be 9331 thousand tones to feed its increasing population of 53.25 million. Assam, Meghalaya and Mizoram had been deficit in foodgrain requirement as per population of 2011. Also, 1.6% is the estimated production growth of the decade (2012 to 2021) required to just suffice in feeding the increasing population. The scope of meeting this requirement of the states depend highly on productivity improvement.

ICAR-KVK CHURACHANDPUR LAUNCHED CAPACITY BUILDING PROGRAMME

Capacity Building and Distribution Programme on scientific cultivation of rice bean under rain fed condition for doubling farmers' income was organised by KVK Churachandpur, in collaboration with Indian Institute of Agricultural Biotechnology, Ranchi, Jarkhand. The program was organized with a view to strengthen the farmers' income and increase their produce through community participatory approach. 31 progressive farmers from different villages of Churachandpur district took active part in the programme. Rice bean seed were also distributed to the farmers.

"WORLD ZOONOSIS DAY" CELEBRATED

KVK, West Garo Hills, organized an awareness programme on the occasion of "World Zoonoses Day" in Aminda Rangsa village. World Zoonoses day is observed on 6th July every year to create awareness amongst people about zoonotic diseases that are transmitted from animals to humans. The World Health Organization estimates that 61 percent of all human diseases are zoonotic in origin, while 75 percent of new diseases discovered in the last decade are zoonotic. Many of these diseases have potential to cover long distance and affect the world. They are now major global threat to public health and animal welfare. The recent outbreak of Japanese encephalitis is an example of such type of diseases. Nipah virus was discovered when it caused a serious outbreak of viral encephalitis among pig farmers in Malaysia in 1998. The sudden spurt of zoonotic diseases in the last few years has caught the world unprepared. Hence to sensitise the people about zoonotic diseases the awareness programme was organized.