

Experiences of Directorate of Oil Palm research with Mobile based communication

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Introduction

- Cell phone is the most unique form of bidirectional communications in the hands of the farmer.
- Kisan Call Centers in the country respond to issues raised by farmers on queries related to agriculture and allied sectors.
- Farmer approaches the Kisan Call Centre only when a problem arises or perceives the need for information based on the condition of the crop.
- Farmer need to perceive the future requirement of the crop and gather the information and adopt .

Mobile services are provided in



Oil Palm at a Glance

Oil Palm is the richest source of vegetable oil and has potential to yield 4-6 tonnes of oil / ha / yr. Palm oil is a wholesome source of energy, rich in Vit A & E. Palm oil is stable against oxidation due to low content of poly unsaturated fatty acids and also non foaming. Have good frying qualities and is suitable for cooking. Used in biscuits, ice creams, soaps, detergents, shampoos etc. Play a vital role in sustainable vegetable oil production, vegetable oil economy and nutritional security of the country. Gives assured income throughout the year for a period of 25 years. Uplift the socio economic status of farmers.

Saves foreign exchange by substituting import of edible oil Provide employment opportunity No risk of theft of crop produce.



Oil palm	:	Highest vegetable oil yielder per unit area (3-6 t/ha)
Family	:	Palmae
Species	:	<i>Elaeis guineensis</i> (African Oil Palm) <i>Elaeis oleifera</i> (American Oil Palm)
Source of oil	:	Palm oil: Mesocarp, Kernel oil: Kernel
Fruit forms (Variety)	:	<i>Dura</i> (Thick shell) <i>Pisifera</i> (Shell less) <i>Tenera</i> (Thin Shell)
Economic cropping period	:	30 years
Climatic requirements:	:	Above 2000 mm distributed rain/ irrigation Max. temp. 29-36°C Min. temp. 18-24°C Sunshine hours - 5 & above
No. of palms/ha	:	143 (9 x 9 x 9 m triangular)
Nursery period	:	12 - 18 months
Pollination	:	Insect (<i>Elaeidobius kamerunicus</i>)
Tree height	:	20 - 30 m
Leaf production/year	:	24-30
Leaf length	:	6 - 8 m
First harvest	:	36 months after planting
Yield of FFB/ha	:	15 - 30 t
No. of bunches/palm/year	:	5 - 12
No. of fruits/bunch	:	Above 2000
Av. bunch weight	:	25 kg.
Weight of fruit	:	30 g.
Fruit to bunch	:	42 - 65%
Mesocarp to fruit	:	60 - 83%
Oil to mesocarp	:	77 - 81%
Kernel to fruit	:	7 - 12%
Oil to kernel	:	49 - 52%
Shell to fruit	:	3 - 11%
Palm oil yield/palm	:	Bunch weight/palm x fruit/bunch x mesocarp/fruit x oil/mesocarp

- Oil palm is an introduced crop in INDIA.
- Directorate of Oil Palm Research (ICAR), is having mandate to conduct research on oil palm and disseminate the technology to farmers.

- Providing quality information, its timeliness and trustworthiness are the important features for its effective adoption by the farmers' to improve productivity.

Oil Palm Kisan Mobile message services (OPKiMMS)

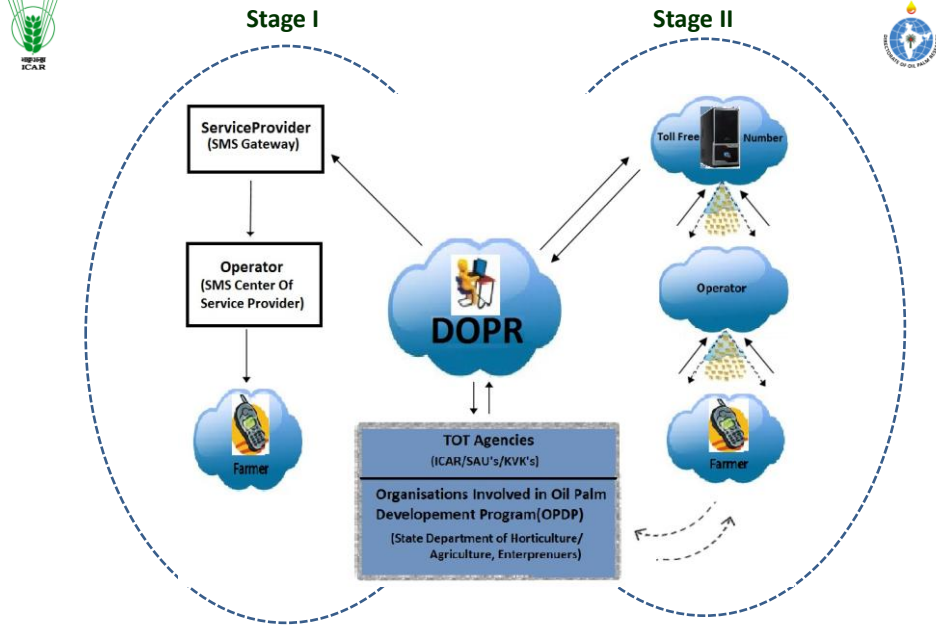


Fig. 1 Operational Model of Oil Palm Kisan Mobile Message Services

The programme was conceptualized and being implemented in the following two stages.

- Collection of mobile numbers of oil palm growers and content preparation
- Publishing of messages, retrieval of published data reports and collection of feedback.

In order to implement this programme, software development was done to store and retrieve the data.

Mobile numbers were collected from the stakeholders

Oil palm can be planted in any season of the year with adequate irrigation facility, best period would be June to December.	ఆయిల్ పాంసు సాగు నీటి వసతి వున్న నేలల్లో ఏ కాలంలో నైనా నాటుకోవచ్చు. అయితే, వర్షాకాలం (జూన్-డిసెంబర్) అనుకూలమైనది.	किसी भी मौसम में इसका रोपण किया जा सकता है। जहा सिंचायी पानी की कमी नहीं हो रोपण का सर्वोत्तम समय जून -दिसम्बर मास।	తాళ బೆళేయన్ను నీలరావరి ప్రదేశగళల్లి వఱడద యావుదే ఖుతుమనగళల్లియూ నాటి మాడబుకుదాగిద్దు జూన్ నింద డిసెంబర్ మాఱేగళు టుత్తమ.
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List of Network Operators

AIRCEL
AIRTEL
BSNL CDMA
BSNL GSM
IDEA
BSNL LANDLINES
LOOP MOBILE
MTNL
MTS
RELIANCE CDMA
RELIANCE GSM
TATA CDMA
TATA DOCOMO
UNITECH

Conclusion

- Database having messages on 72 contents of oil palm package of practices were developed
- Message were made available under nine categories in four languages i.e English, Hindi, Kannada and Telugu as text and voice messages.
- Database of 50,261 farmers, entrepreneurs, state department officials' was ollected, 15,665 unique mobile and land line numbers available from Andhra Pradesh, Karnataka, Goa, Gujarat, Maharashtra, Chattisgarh, Meghalaya, Nagaland, Arunachal Pradesh, Odisha and Mizoram were collected.
- Published 54 text SMS having an SMS count of 9.38 lakh and 82 % as delivery percentage.
- Published 41 voice messages to 3.61 lakh mobile and landline numbers and delivery percentage was 42.9 %.
- Feedback revealed that mobile services are useful in adoption of practices, would like to have Voice message/SMS at weekly interval, farmers' like to have toll free call back facility to contact the officers and scientists