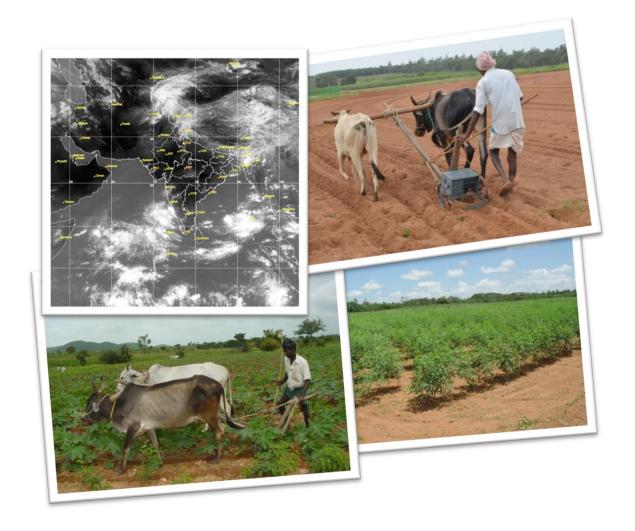


# **TECHNOLOGY DEMONSTRATION COMPONENT**

# **MONSOON ACTION PLAN - 2015**

Village Level Contingency Plans for Climate Resilient Agriculture





Technology Demonstration Component
National Innovations in Climate Resilient Agriculture (NICRA)
ICAR-Central Research Institute for Dryland Agriculture, Hyderabad
Natural Resource Management Division
Indian Council of Agricultural Research (ICAR), New Delhi



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#### About the Flans.....

In the review-cum-action plan preparation workshops held at all the 8 Zonal Project Directorates during April - May, 2015, it was decided to chalk out the Monsoon Action Plan for NICRA villages. This is to be done immediately after the second stage forecast is announced by the India Meteorological Department (IMD) in the first week of June. The revised IMD forecast calls for enhanced preparedness for the ensuing *kharif* season in view of the prediction for a below normal monsoon (88% of the long period average) that is likely to affect agriculture in several parts of the country.

The Technology Demonstration Component of NICRA, implemented by 121 Krishi Vigyan Kendras (KVKs), addresses climate vulnerabilities in identified target districts spread across the country. Among these, 50 drought-prone districts have been identified in 17 States. The monsoon action plan essentially deals with village level contingency measures in field crops to tackle likely scenarios of delay in onset of monsoon and deficit rainfall situations. The contingency plan for the normal crops in the village entails demonstration of short duration varieties of the main crop in case of delay in planting, and demonstration of alternate crop in case of delay beyond cutoff sowing date for e.g., 15th July or later. Also, to cope with deficit rainfall conditions, demonstration of several drought proofing contingency measures related to crop, soilmoisture, nutrient and water management are included in the plans. Drought in rainfed areas often results in shortage of fodder for livestock. The plans also cover fodder production strategy to be implemented in the adopted village. In the event of any *kharif* unsown areas leftover in the village, an early *rabi* crop plan is prepared for implementation to compensate for the loss in production during *kharif*.

Drought in agriculture is an unfolding situation depending upon the onset and progress of the monsoon. NICRA KVKs will implement the village level contingency plan for drought depending upon the likely scenario that will be experienced at the village level in real time. Availability of inputs such as seed of short duration varieties and other inputs is to be ensured. Some of the drought proofing measures such as *insitu* moisture conservation and rainwater harvesting practices will be implemented as part of preparedness at or before the sowing time, respectively. The NICRA KVKs have been advised to prioritize the technology interventions to focus on building climate resilience in farming and strengthening coping ability of farmers during *kharif* 2015 season. Appropriate and focused advisories may be prepared and disseminated so as to reach the farmers in time to cope with various contingent situations.

We acknowledge the timely cooperation extended by the Zonal Project Directors, Nodal Officers at ZPDs and all NICRA KVKs for developing the village level contingency plans for implementation in the ensuing *kharif* season. We are grateful for the constant guidance and support received from NICRA Team, Dr. A.K. Sikka, DDG (Natural Resource Management) and Dr. A.K. Singh, DDG (Agricultural Extension), ICAR.

YG Prasad PI, NICRA-TDC

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KVK/District	: Ahmednagar
State	: Maharashtra
Name of Village	: Nirmal Pimpri, Pimpri Lokai
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 2 <sup>nd</sup> week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

1. Contingency crop plan for delay in planting						
Normal crops	Normal	Normal	Contingency plan for onset delay			
	sown area	sowing time	Demonstration of	Demonstration of		
	(ha)		short duration/	alternate crop and		
			drought tolerant	variety for delay in		
			varieties of	planting (e.g., after		
			normal crop	15 <sup>th</sup> July or specify		
				date)		
Soybean	Nirmal	2 <sup>nd</sup> week of	Soybean-	End of July		
	pimpri: 430	June to 2 <sup>nd</sup>	JS 95-60,	Soybean (JS 95-60,		
	Pimpri lokai:	week of July	JS 93-05	JS 93-05)		
	120			,		
Pearl millet	Nirmal	2 <sup>nd</sup> week of	Hybrids	-		
	pimpri: 400	June to 2 <sup>nd</sup>				
	Pimpri lokai:	week of July				
	260					
Fodder crops:	Nirmal	2 <sup>nd</sup> week of	Fodder Pearl	Fodder Sorghum		
Pearl millet/	pimpri: 700	June to 2 <sup>nd</sup>	millet (first	(Sugargraze)		
Sorghum/	Pimpri lokai:	week of July	cutting at 55	Fodder Maize		
Maize	60		days)	(African tall)		
				• Fodder Pearl millet		
Cotton	Pimpri	2 <sup>nd</sup> week of	Hybrids	After 15th July		
	lokai:40	June to 2 <sup>nd</sup>		Soybean (JS 95-60,		
		week of July		JS 93-05)		

2. Demonstration of agronomic measures				
Category	Crop (s)	Contingency measures for deficit rainfall condition		
Crop management (intercropping etc.)	Soybean	Soybean (JS-93-05/95-60) + Pearl millet (Hybrids) (4:2) Soybean (JS-93-05/95-60) + Pigeonpea (Vipula) (3:1/6:2)		
	Pearl millet	Pearl millet + Moth bean (mixed cropping)		
	Cotton	Cotton + Soybean/ Greengram/ Blackgram		
Soil moisture management (in situ conservation practices)	Soybean/ Pearl millet/Cotton	Open conservation furrow after every 4-5 rows		
Nutrient management (foliar nutrient sprays etc.)	Soybean/ Pearl millet	Foliar application of 19:19:19 @ 0.5%		
	Cotton	Foliar application potassium nitrate @ 1%		
Water management (Life saving irrigation from harvested water)	Soybean/ Pearl millet	Protective irrigation through sprinklers		

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Giant Pearl millet (Nutrifeed)
  - Fodder Sorghum (Sugargraze, local)
  - Fodder Maize (African Tall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Fodder crops (Giant Pearl millet, Fodder Sorghum, Fodder Maize) in September; Rabi Sorghum

KVK/District	: Amravati
State	: Maharashtra
Name of Village	: Takali (BK)
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 2 <sup>nd</sup> week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency plan for onset delay		
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Soybean	356	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Soybean: JS-95-60, (80-85 days) JS-93-05 (90 days)	• Pigeonpea (BSMR-736, BSMR-853)	
Cotton Irrigated	38	3 <sup>rd</sup> week of May to last week of June	Bt-Cotton hybrids	<ul><li>PKV Suvarna</li><li>NCS -145</li></ul>	
Cotton Rainfed	220	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Hybrids	<ul><li>PKV Suvarna</li><li>NCS -145</li></ul>	
Pigeonpea	62	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Pigeonpea (BSMR-736, BSMR-853)	<ul><li>Pigeonpea (BSMR-853)</li><li>Sesame (N-8/ALT-64)</li></ul>	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Soybean	• Soybean (JS-93-05) + Pigeonpea (BSMR-736) (4:2)
(intercropping etc.)		• Soybean (JS-93-05) + Sorghum (CHS-14) + Pigeonpea (6:2:1) or (9:2:1)
	Cotton	Border crop (Pigeonpea) (BSMR-736)
		• Cotton + Sorghum (CHS-14) + Pigeonpea (BSMR-736) + Sorghum (CHS-14)(3:1:1:1)
Soil moisture management (in situ conservation practices)	Soybean	<ul> <li>Planting methods (Ridge &amp; furrow, Broad bed furrow, Strip cropping)</li> <li>Sowing across the slope</li> <li>Open conservation furrow</li> </ul>
Nutrient management (foliar	Cotton	• Foliar spray of 2% urea at the time of flowering & 2% DAP at the time of boll formation
nutrient sprays etc.)		• Foliar spray of 2% urea at the time of flowering & 1% urea + 1% magnesium sulphate during boll formation
	Soybean	• Foliar spray of 2% urea during 50-70 DAS
Water management (Life saving	Soybean	Protective irrigation through sprinklers from harvested water in open wells & farm ponds
irrigation from harvested water)	Cotton	Protective irrigation through drip from open wells

- 3. List of fodder management demonstrations for livestock in contingency situations <u>August/ September</u>
  - Fodder Sorghum (CSH-4) in 10 ha
  - Fodder Maize (African Tall) in 14.5 ha <u>Annual fodder</u>
  - Hybrid Napier (Yashwant-Jaywant) in 5 ha
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Ajwan (Lam selection) in 10 ha
  - Mustard (Pusa Shatabdi) in 50 ha
  - Onion(Baswant-780 & Bhima Subhra) in 10 ha

KVK/District	:	Amreli
State	:	Gujarat
Name of Village	:	Karjala
Climate vulnerability	:	Drought & salinity
Normal onset of Monsoon (date) at the location	:	1st fortnight of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency plan for onset delay		
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify	
Cotton	546	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	normal crop Bt. Variety (G.Cot.8 BT)	<ul><li>date)</li><li>Blackgram (T-9)</li><li>Greengram (GM-4)</li></ul>	
Bajra	29	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Sorghum (Gundri)	<ul><li>Blackgram (T-9)</li><li>Greengram (GM-4, PurvaTil-1)</li></ul>	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Cotton	Cotton (G.Cot.8 BT) + Soybean (GS-3)
Soil moisture management ( <i>in situ</i> conservation practices)	Cotton	Interculture
Nutrient management (foliar nutrient sprays etc.)	Cotton	Foliar spray of 2% urea
Water management (Life saving irrigation from harvested water)	Cotton	Protective irrigation through drip

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum (Gundri), Fodder Pearl millet
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Sesame (Purva-1), Fodder Sorghum (Gundri)

KVK/District	: Anantapur
State	: Andhra Pradesh
Name of Village	: Chamaluru
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing	Demonstration of	Demonstration of alternate	
	area	time	short duration/	crop and variety for delay in	
	(ha)		drought tolerant	planting (e.g., after 15th July	
			varieties of normal	or specify date)	
			crop		
Groundnut +	460	June 2 <sup>nd</sup>	Groundnut (K-6,	After July 15 <sup>th</sup>	
Pigeonpea		fortnight	Dharani)	Setaria (Suryanandi)	
		- July		Pigeonpea (close spacing)	
Castor	70	June	PCH-111, DCH-	<u>After August</u>	
			177, DCH-519	• Yellow sorghum (AJ 141)	
Pigeonpea	30	June	LRG-41, PRG-158	• Guar gum (HG-365)	
				<u>September</u>	
				• Yellow sorghum (AJ 141)	
				Horsegram	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Groundnut	<ul> <li>Groundnut + Pigeonpea</li> <li>Intercultivation with <i>danthi</i> in Groundnut</li> <li>Thinning in Pigeonpea</li> </ul>
Soil moisture management (in situ conservation practices)  Nutrient management (foliar nutrient sprays etc.)	Groundnut, Pigeonpea, Castor Groundnut	<ul> <li>Conservation furrows at 3.6 m interval</li> <li>Chisel plough in Groundnut + Pigeonpea &amp; Castor( before sowing)</li> <li>Foliar Spray of urea @2 %</li> </ul>
Water management (Life saving irrigation from harvested water)	Groundnut	Protective irrigation with sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (Co FS-29)
  - Fodder Pearl millet (Co-4)
  - APBN fodder slips
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Yellow Sorghum, Guar, Greengram in August
  - Horsegram in September

KVK/District	: Aurangabad
State	: Bihar
Name of Village	: Harigaon
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	78	1 <sup>st</sup> week of July to 1 <sup>st</sup> week of August	Sahbhagi (115 to 120 days), Susk Samrat (110 to 115 days), Ardhjal (90 to 100 days)	After 15th August  Blackgram (Navin)  Sesame (Kankesafed, Sekhar)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	Staggered community nursery (Sahbhagi)
Soil moisture management (in situ conservation practices)	-	-
Nutrient management (foliar nutrient sprays etc.)	Paddy	Foliar spray of urea 2% in dry spells
Water management (Life saving irrigation from harvested water)	Paddy	Life saving irrigation at critical stages

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize
  - Fodder Sorghum
  - Cowpea
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Blackgram (Urd) in August
  - Horsegram (Kulthi) in August
  - Toria (PT 303, RAU TS 17) in September

KVK/District	: Aurangabad
State	: Maharashtra
Name of Village	: Shekta
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 2 <sup>nd</sup> week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing time	Demonstration of	Demonstration of	
	area		short duration/	alternate crop and	
	(ha)		drought tolerant	variety for delay in	
			varieties of normal	planting (e.g., after 15 <sup>th</sup>	
			crop	July or specify date)	
Soybean	15	2 <sup>nd</sup> week of	MAUS -158, MAUS-	MAUS-71, JS-335	
		June to 3 <sup>rd</sup>	162 (95-98 days)		
D:	1.6	week of July	DDN 711/150 160	DDN 711(150 160 1)	
Pigeonpea	16	2 <sup>nd</sup> week of June to last	BDN-711(150-160	BDN-711(150-160 days)	
		week of July	days)		
Greengram	10	Till June	BM-2002-1, BM-	Pearl millet	
		end	2003-2 (65-70 days)	(ABPS-4-3, Shradha,	
				Saburi, PPC-6)	
Cotton	226	2 <sup>nd</sup> week of	Suraj, NH-615, PA-	Suraj, NH-615 and	
		June to 2 <sup>nd</sup>	08,PA-255,& all Bt	short duration Bt	
		week of July	Cotton hybrids	hybrids (less than 150	
				days)	
Maize	50	2 <sup>nd</sup> week of	Maharaja, Pinnacle,	Yuvraj, Surya, Kiran,	
		June to 2 <sup>nd</sup>	Yuvraj	Arun (80-90 days)	
		week of July			

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Soybean	• Soybean + Pigeonpea (4:2)
(intercropping etc.)	Pigeonpea	• Pigeonpea + Pearl millet (4:2)
	Cotton	• Cotton + Greengram/Blackgram (4:2)
Soil moisture	Soybean	Broad bed furrow method
management ( <i>in situ</i> conservation practices)	Cotton, Pigeonpea	<ul> <li>Opening of furrows in alternate row of Bt Cotton &amp; Pigeonpea</li> </ul>
Nutrient management (foliar nutrient sprays	Soybean, Pigeonpea	• Foliar spray of 2% urea
etc.)	Greengram	• Foliar spray of 1 % potassium nitrate
Water management (Life saving irrigation from harvested water)	Pigeonpea, Pomegranate, Sweet Orange	<ul><li>Protective irrigation through sprinkler</li><li>Organic mulching</li></ul>

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Pearl millet
  - Hybrid Napier (DNH-10)
  - Fodder Maize (African Tall)
- 4. Early rabi crop plan for demonstration (for planting in kharif unsown areas during August/ September in the village)

  - MaizeRabi Sorghum
  - Potato
  - Vegetables (Tomato, Chili, Brinjal)

KVK/District	: Balaghat
State	: Madhya Pradesh
Name of Village	: Koste
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

			~	1 0 . 11
Normal	Normal	Normal sowing	Contingency plan for onset delay	
crops	sown area	time	Demonstration of short duration/	Demonstration of alternate crop and
	(ha)		drought tolerant	variety for delay in
			varieties of normal crop	planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	138	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Upland Danteshwari & Sahbhagi (95-100 days) Medium lowland MTU-1010 (115- 120 days)	2 <sup>nd</sup> week of July Maize in uplands
Pigeonpea	12	2 <sup>nd</sup> week of July to 1 <sup>st</sup> week of August	<u>Upland</u> Pigeonpea short duration variety (TJT-501)	<ul><li>Colocassia (Desi)</li><li>Blackgram (Pant 31)</li></ul>

2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	Community nursery (JRH-5)
		Direct Seeded Rice, line showing in uplands
Soil moisture management ( <i>in situ</i> conservation practices)	-	-
Nutrient management (foliar nutrient sprays etc.)	Paddy	Foliar spray of 2% urea in community nursery
Water management (Life saving irrigation from harvested water)	Paddy	Protective irrigation

3. List of fodder management demonstrations for livestock in contingency situations

#### August/ September

- Maize (African Tall)
- Sorghum (MP Chari)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Potato (Kufri chipsona, 90-110 days) in September
  - Mustard (Narendra Ageti Rai-4, 100-105 days) in September

KVK/District	: Banaskantha
State	: Gujarat
Name of Village	: Fatepura
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 20 <sup>th</sup> to 25 <sup>th</sup> June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency plan for onset delay	
crops	sown	time	Demonstration of	Demonstration of
	area (ha)		short duration/	alternate crop and
			drought tolerant	variety for delay in
			varieties of	planting (e.g., after 15 <sup>th</sup>
			normal crop	July or specify date)
Groundnut	48	2 <sup>nd</sup> week of	GG-2 (105 days),	• Blackgram (Guj.1)
		June to 4th	GG-11 (105	• Cluster bean (Guj.2)
		week of June	days), TG-37 A	, ,

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Groundnut (GG-20)	• Groundnut (GG20) + Blackgram (2:2)
Soil moisture management ( <i>in situ</i> conservation practices)	Groundnut (GG-20)	Interculturing before peg formation
Nutrient management (foliar nutrient sprays etc.)	Groundnut Blackgram Cluster bean	<ul><li>2% NPK Foliar spray</li><li>Foliar spray of 2% urea.</li><li>125kg gypsum/ ha basal application.</li></ul>
Water management (Life saving irrigation from harvested water)	Groundnut	One irrigation through sprinkler

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (Malvan muticut Sorghum)
  - Napier hybrid
  - Fodder Maize (African tall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Amaranthus (Guj.1 & Guj.2)
  - Potato (K.Badshah, Pukharaj)
  - Mustard (GDM-4)

KVK/District	: Banka
State	: Bihar
Name of Village	: Mehra
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 2 <sup>nd</sup> week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	40	June 2 <sup>nd</sup> week to 1 <sup>st</sup> week of August	Sabour Ardhjal, Sahbhagi	Pigeonpea, Sesame
Maize	10	June last week to July	Hybrid	<ul><li>Greengram (Samrat, SML 668</li><li>Blackgram (Utara IPU 94-1)</li></ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pigeonpea, Maize, Jute, Paddy	<ul> <li>Pigeonpea + Maize + Jute</li> <li>Direct Seeded Rice (Sahbhagi, Sabour Ardhjal)</li> <li>Staggered community nursery</li> </ul>
Soil moisture management (in situ conservation practices)	Pigeonpea	Cluster bean
Nutrient management (foliar nutrient sprays etc.)	Paddy, Pearl millet	<ul><li>Foliar spray of 2% urea</li><li>Foliar spray of thiourea</li></ul>
Water management (Life saving irrigation from harvested water)	-	-

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Pearl millet, Guinea grass, Napier grass, Berseem, Cluster bean (RGC 1003, 1017)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during Aug/ Sept in the village)
  - Kulthi in August
  - Safflower in September
  - Toria (Panchali) in September
  - Mustard (Narendra Ageti Rai-4) in September
  - Potato (Kufri chipsona) in September

KVK/District	: Baramati (Pune)
State	: Maharashtra
Name of Village	: Jalgaon KP
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 7 <sup>th</sup> June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

	1. Contingency crop plan for delay in planting				
Normal	Norm	Normal sowing	Contingency plan for onset delay		
crops	al	time	Demonstration of	Demonstration of alternate	
	sown		short duration/	crop and variety for delay	
	area		drought tolerant	in planting (e.g., after 15 <sup>th</sup>	
	(ha)		varieties of normal	July or specify date)	
			crop	,	
Pearl	87	June 1st week to	ICTP-8203,Shradha,	Pigeonpea (Vipula,	
millet		2 <sup>nd</sup> week of July	Saburi, Shanti	ICPL87), Sunflower	
				(MFSH-17), Onion (Bhima	
				Super, Phule Samartha)	
Maize	60	June 1st week to	African tall	No change	
		4th week of July	(Rajashree)		
Onion	27	June 1st week to	Bhima Super, Phule	No change	
		4th week of July	Samartha		
Greengram	5	June 1st week to	Phule Vaibhav	Pigeonpea (Vipula,	
		4th week of June		ICPL87), Sunflower	
				(MFSH_17), Onion (Bhima	
				super, Phule Samartha)	
Pigeonpea	5	June 1st week to	Vipula, ICPL-87	No change	
_		2 <sup>nd</sup> week of July			

2. Demonstration of agronomic measures				
rop (s)	Contingency measures for deficit rainfall condition			
earl millet	<ul> <li>Pearl millet (ICTP-8203) + Sunflower (Ganga Kaveri)</li> </ul>			
	2:1			
	<ul> <li>Hoeing and weeding in sunflower at 20 DAS</li> </ul>			
,				
3 · · ·	<ul> <li>Hoeing and weeding at 20 DAS</li> </ul>			
- /	<ul> <li>Opening of conservation furrows after every two rows</li> </ul>			
igeonpea	<ul> <li>Transplanting of 21 days old seedlings</li> </ul>			
abi	<ul> <li>Compartmental bunding (flat beds of 10 X 10 m) for</li> </ul>			
orghum	moisture conservation			
nion	<ul> <li>Broad bed furrow planting with BBF Planter and</li> </ul>			
	transplanting of seedlings by ridge and furrow method			
reengram	BBF Planting and sprinkler irrigation			
orghum	<ul> <li>Foliar application of 0.5% NPK (13:0:45) during dry</li> </ul>			
	spell for Phule Anuradha			
nion	• Foliar application of 2 % urea			
reengram	<ul> <li>Foliar spray of 1 % potassium nitrate</li> </ul>			
nion	Sprinkler irrigation			
	carl millet  unflower chanu) geonpea lipula) geonpea abi orghum nion reengram orghum nion			

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (P-3502, African tall) in August
  - Silage making
  - Multi-cut Pearl millet (Giant Bajra)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Demonstration of Sorghum varieties as per soil type e.g. Phule Anuradha in shallow soils
  - Phule Vasudha in medium soils
  - Phule Vasudha, Phule Revati in heavy soils
  - Phule Vasudha in medium irrigated soils
  - Safflower (Bhima), early rabi Onion (Bhima Super)

KVK/District	: Barmer
State	: Rajasthan
Name of Village	: Garal Sujan Singh Sutharo Ka Talla
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 1 <sup>st</sup> week of July
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency 1	olan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Pearl millet	900	1 <sup>st</sup> week of July to 15 <sup>th</sup> July	Pearl millet (HHB IMP 67, RHB 171, RHB 177, PROAGRO 9444, RHB-173, MPMH-17)	<ul><li>Cluster bean (RGC 1013, RGC 1017)</li><li>Greengram (GM 4, IPM 02-03)</li></ul>
Cluster bean	210	1st July to end of July	Cluster bean (RGC 1013, RGC 1017, RGC-1038, RGC- 1055,GG-2,RGC- 1066)	• Cluster bean (RGC 1013, RGC 1017, RGC-1066)
Greengram	125	1 <sup>st</sup> July to end of July	Greengram (GM 4, IPM 02-03)	• Greengram (GM 4)
Moth bean	325	1 <sup>st</sup> July to end of July	Moth bean (RMO 435, RMO 423, CAZRI moth 2)	• Moth bean (RMO 40)
Sesame	40	1 <sup>st</sup> week of July to 15 <sup>th</sup> July	Sesame (RT 125, RT 127)	<ul><li>Moth bean (RMO 40)</li><li>Cluster bean (RGC 1017)</li></ul>

#### 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pulses	Greengram/ Moth bean + Cluster bean
Soil moisture management (in situ conservation practices)	Pearl millet, Greengram, Moth bean, Cluster bean	Weeding with rubber wheel hoe
Nutrient management (foliar nutrient sprays etc.)	Pearl millet, Greengram, Cluster bean	Foliar spray of 1-2% urea+ 0.5 % ZnSo4
Water management (Life saving irrigation from harvested water)	Pearl millet	Protective irrigation through sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Pearl millet (Raj-171, RHB-177)
  - Cluster bean (RGC-1002, RGC-1003) for fodder purpose
  - Pearl millet + Moth bean (with 25% higher seed rate of 8-10 kg N/ha at 15-20 DAS after receipt of rainfall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)

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KVK/District	: Bathinda
State	: Punjab
Name of Village	: Killi Nihal Singh
Climate vulnerability	: Drought, Heat wave
Normal onset of Monsoon (date) at the	: 29 <sup>th</sup> June 2015
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing time	Contingency pl	an for onset delay
crops	sown area (ha)	J	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15th July or specify date)
Basmati	500	Second week of July (in case of DSR 1st week of July)	Pusa Basmati- 1509, Pusa Basmati-1121	Greengram (ML-911 & ML-818)
Paddy	170	15-25 <sup>th</sup> June for transplanting, in case of DSR 25 May to 15 <sup>th</sup> June	PR-124, PR-111	Direct seeding of Pusa Basmati-1509
Cotton	122	3 <sup>rd</sup> week of April	Ankur-3028, FMDH-9, FDK-124	-
Guar	12	1st week of July	HG-365	Maize (J-1006)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Soil moisture management (water	Basmati &	Use of tensiometers for judicious
management)	Paddy	use of water
Nutrient management (foliar	Cotton	Four foliar sprays of potassium
nutrient sprays etc.)		nitrate (2%)
Water management (Life saving	Basmati	DSR
irrigation from harvested water)		

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (J-1006)
  - Ryegrass (Punjab Ryegrass No.1)
  - Berseem (BL-10, BL-1, BL-42) (rabi)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Toria (TL-17, PBT-37)
  - Fodder Maize (J-1006)

KVK/District	: Belagavi
State	: Karnataka
Name of Village	: Yadagud
Climate vulnerability	: Drought and Heat wave
Normal onset of Monsoon (date) at the	: June 1 <sup>st</sup> week
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency p	olan for onset delay
crops	sown	time	Demonstration of	Demonstration of
	area		short duration/	alternate crop and
	(ha)		drought tolerant	variety for delay in
			varieties of normal	planting (e.g., after 15 <sup>th</sup>
			crop	July or specify date)
Soybean	87	1st week of	JS-335	• Pigeonpea (TS-3R)
		June to 2 <sup>nd</sup>		• Horsegram (GPM-6)
		week of July		• Cowpea (C-152)
Maize	25	3rd week of June	ICTP-818	After 15 <sup>th</sup> August:
		to 2 <sup>nd</sup> week of July		• Spreading groundnut (Pandichari-8)
Groundnut	11	2 <sup>nd</sup> week of	TMV-2, GPBD-4	Sunflower (KBSH-44)
		June to 2 <sup>nd</sup>		
		week of July		
Sorghum	17	2 <sup>nd</sup> week of	DSV-2	Horsegram (GPM-6)
		June to 2 <sup>nd</sup>		
		week of July		

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Maize	Maize (ICTP-818) + Soybean (JS-335) (1:2)
	Pigeonpea	Foxtail millet (PS-4) + Pigeonpea(TS-3R) (2:1)
Soil moisture management (in situ conservation practices)	Sorghum, Foxtail millet	Compartmental bunding
Nutrient management (foliar nutrient sprays etc.)	Sorghum	Foliar spray of 2% urea
	Foxtail millet	Foliar spray of thiourea @ 1000 ppm
Water management (Life saving irrigation from harvested water)	Soybean and Pigeonpea	Protective irrigation through drip

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (MP Chary)
  - Fodder Maize (African Tall)
  - Hybrid Napier (APBN-1)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Horsegram (CRIDA-18R/GPM-6) in August
  - Maize (Arjun) in September
  - Fodder Maize ( African Tall) in August
  - Fodder Horsegram (Dhinanatha) in August
  - Spreading Groundnut (Pandichary-8) in August

KVK/District	: Bhatapara
State	: Chhattisgarh
Name of Village	: Bakulahi
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> to 20 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

#### 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Rice	63	3 <sup>rd</sup> to 4 <sup>th</sup> week of June	Indira Barani Dhan-1, Samleshwari, MTU- 1010	Drum seeding	

#### 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Rice	<ul> <li>Summer deep Ploughing</li> <li>Direct Seeded Rice.</li> <li>Drum seeding of sprouted seed</li> <li>Use of post emergence herbicide to control weeds in DSR</li> </ul>
Soil moisture management ( <i>in</i> situ conservation practices)	Rice	-
Nutrient management (foliar nutrient sprays etc.)	Rice	<ul><li>Use of neem coated Urea</li><li>Foliar spray of 2% Urea</li><li>Foliar spray of PPFM during dry spell</li></ul>
Water management (Life saving irrigation from harvested water)	Rice	<ul> <li>Protective irrigation through Sprinklers</li> </ul>

- 3. List of fodder management demonstrations for livestock in contingency situations
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Rabi Pigeonpea in September.
  - Sowing of Wheat, Lathyrus through Zero till seed cum ferti drill.

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KVK/District	: Chatra
State	: Jharkhand
Name of Village	: Mardanpur
Climate vulnerability	: Drought, Heat wave
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency	plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Rice	420	Last week of June to end of July	Anjali, Bandana, Abhishek, Lalat, Sahbhagi dhan	<ul> <li>Direct seeded Rice (Abishek)</li> <li>Aerobic rice cultivation</li> <li>Sweet Potato (Shree Bhadra)</li> <li>Finger millet</li> </ul>
Maize	120	15 <sup>th</sup> June to 15 <sup>th</sup> July	Birsa Makka 1 Birsa Makka 2	<ul> <li>Niger (Birsa niger 1 and Birsa Niger 2</li> <li>Blackgram (Birsa Kulthi 1)</li> </ul>
Pigeonpea	60	15 <sup>th</sup> June to 15 <sup>th</sup> July	Narendar arhar-1 Narendar arhar-2	-
Vegetable (Tomato)	24	Last week of July to end of August	Rohit	_

2. Demonstration of agronomi	2. Demonstration of agronomic measures				
Category	Crop (s)	Contingency measures for deficit rainfall			
		condition			
Crop management	Rice	Rice + Pigeonpea			
(intercropping etc.)		Direct Seeded Rice (Abishek)			
		Aerobic rice cultivation			
		Staggered community nursery raising			
Maize		Maize + Pigeonpea			
		Maize + Bhendi			
Soil moisture management (in	Rice, Maize,	Bunding			
situ conservation practices)	Vegetable	Mulching			
Nutrient management (foliar	Rice	• Foliar spray of 2% Urea in nursery			
nutrient sprays etc.)		1 3			
Water management (Life	Rice	Protective irrigation through			
saving irrigation from		pond/well for nursery			
harvested water)		Protective irrigation through			
		sprinklers, drip in vegetable crop			

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Maize (African Tall)
  - Sudan grass
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Niger (Birsa niger 1 and 2)
  - Toria (Siwani)
  - Kulthi (Birsa Kulthi 1)
  - Vegetable (Tomoto, Brinjal, Cauliflower (Irrigated area)
  - Potato (Irrigated area)

KVK/District	: Chhatarpur
State	: Madhya Pradesh
Name of Village	: Chaukhda
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing time	Contingency pl	an for onset delay
crops	sown area (ha)		Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Soybean	10	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	JS-9560,	Blackgram (Azad-3) Sesame (TKG-55)
Blackgram	42	2 <sup>nd</sup> week of June to 1 <sup>st</sup> week of August	PU-35	-
Sesame	57	2 <sup>nd</sup> week of June to 1 <sup>st</sup> week of August	JTS-8	-
Groundnut	26	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	TG 37A	Blackgram (Azad-3) Sesame- TKG-55

#### 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Soybean	Soybean (JS-9560) + Pigeonpea (JKM- 189)
Soil moisture management ( <i>in situ</i> conservation practices)	Soybean, Blackgram	Ridge furrow method
Nutrient management (foliar nutrient sprays etc.)	-	-
Water management (Life saving irrigation from harvested water)	Groundnut	Protective irrigation through Sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Mustard (Pusa Agrani)

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KVK/District	: Chikkaballapura
State	: Karnataka
Name of Village	: S. Raghuttahalli
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 2 <sup>nd</sup> week of July
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal crops	Normal	Normal	Contingency plan for onset delay		
	sown	sowing	Demonstration of	Demonstration of	
	area	time	short duration/	alternate crop and	
	(ha)		drought tolerant	variety for delay in	
			varieties of normal	planting (e.g., after 15 <sup>th</sup>	
			crop	July or specify date)	
Groundnut +	36	May 2 <sup>nd</sup>	BRG2 Pigeonpea	Horsegram / Cowpea	
Pigeonpea		week to	variety from 4th week	after July 4th week	
		June 3 <sup>rd</sup>	of June to 3 <sup>rd</sup> week of		
		week	July		
Finger millet	4	2 <sup>nd</sup> week	GPU-48 till 2 <sup>nd</sup> week	Horsegram / cowpea	
		of July	of August	after August	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Finger millet	<ul> <li>Staggered nursery with short duration varieties (GPU 48)</li> </ul>
Soil moisture management (in situ conservation practices)	Pigeonpea	<ul> <li>Opening of conservation furrow at intervals.</li> <li>Trenching along the bunds to conserve rainwater</li> </ul>
Nutrient management (foliar nutrient sprays etc.)	Pigeonpea	• Foliar spray of DAP (2%)/ 19:19:19 (2%)
Water management (Life saving irrigation from harvested water)	Finger millet, Pigeonpea	Protective irrigation with sprinkler

- 3. List of fodder management demonstrations for livestock in contingency situations
  - CO4 perennial grass
  - Dry fodder protection by covering stacks with tarpaulin sheets.
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Cowpea
  - Horsegram
  - Field bean

KVK/District	: Chitrakoot
State	: Uttar Pradesh
Name of Village	: Titihara
Climate vulnerability	: Drought and Heat wave
Normal onset of Monsoon (date) at the	: 26 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

#### 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing time	Demonstration of	Demonstration of	
	area (ha)		short duration/ drought tolerant	alternate crop and variety for delay in planting (e.g.,	
	(Ha)		varieties of normal crop	after 15th July or specify date)	
Greengram	22	1st week of July to 3rd week of July	PDM-139 (65-70 days)	Maize (Hybrid)	
Sesame	20	1 <sup>st</sup> week of July to 3 <sup>rd</sup> week of July	T-4	Pigeonpea (Narendra-1)	
Pigeonpea	8	Last week of June	TJT-501 (130-140 days)	Sesame (Pragati)	
Rice	8	3 <sup>rd</sup> and 4 <sup>th</sup> week of June	Sahbhagi (105- 110 days)	Blackgram (Azad-1)	
Tomato	1	1 <sup>st</sup> week of July to 3 <sup>rd</sup> week of July	Hybrids	Pearl millet (ICTP-8203)	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Paddy	Sahbhagi
Soil moisture management (in situ conservation practices)	Pigeonpea	Ridge furrow method
Nutrient management (foliar nutrient sprays etc.)	Sorghum	Foliar spray of 2% urea
Water management (Life	Pigeonpea,	Protective irrigation through sprinkler,
saving irrigation from harvested water)	Rice	Stored water in check dam will be used

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum (Pusa chari-109)
  - Perennial grass (Napier)
  - Silage preparation in poly bags
  - Mineral mixture blocks for feed supplementation
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Ageti rai (Narendra rai-4) (100 to 105 days)
  - Veg pea (Arkil) (65 to 75 days)

KVK/District	:	Datia
State	:	Madhya Pradesh
Name of Village	:	Sanora, Barodi
Climate vulnerability	:	Drought
Normal onset of Monsoon (date) at the location	:	June last week

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Groundnut	50	Last week of June	JGN 23 (110 days)	Sesame short duration variety (JTS-8)	
Blackgram	100	First week of July	IPU-94-1	Blackgram Azad-1	
Soybean	40	Last week of June	JS 9560	Pigeonpea short duration variety (ICPL- 88039)	
Sesame	80	First week of July	JTS-8	Blackgram + Pigeonpea	
Rice	20	Last week of June	PUSA 1509	-	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Soybean Blackgram Groundnut	<ul> <li>Short duration variety JS-9560</li> <li>Intercropping Blackgram + Sesame</li> <li>Intercropping Groundnut + Blackgram</li> </ul>
Soil moisture management (in situ conservation practices)	Sesame, Blackgram, Pigeonpea Groundnut Rice	<ul><li>Ridge and furrow method</li><li>Sowing across the slope</li><li>Direct Seeded Rice</li></ul>
Nutrient management (foliar nutrient sprays etc.)	Blackgram Paddy	<ul> <li>Foliar spray of 1 % Potassium nitrate</li> <li>Foliar spray of PPFM during dry spell</li> </ul>
Water management (Life saving irrigation from harvested water)	Groundnut and Soybean	Protective irrigation through sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (African Tall)
  - Napier Bajra hybrid (IGFRI-6)
  - Cowpea (UPC-5286)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during Aug/ Sept in the village)
  - Toria (JT-1) in September

KVK/District	: Davangere
State	: Karnataka
Name of Village	: Siddanuru
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 2 <sup>nd</sup> Week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

#### 1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency plan for onset delay		
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Maize	150	1 <sup>st</sup> to 2 <sup>nd</sup> week of June	Private hybrids	<ul><li>Finger millet (ML-365)</li><li>Pigeonpea (BRG-2)</li></ul>	
Finger millet	10	1st week of July	GPU-28	• ML-365	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.) Soil moisture management (in situ conservation practices)	Maize Finger millet Maize Finger millet	<ul> <li>Maize + Pigeonpea (6:2)</li> <li>Finger millet+ Pigeonpea (8:1)</li> <li>Sowing across the slope</li> <li>Maintaining plant population</li> <li>Opening of conservation furrows</li> <li>Live mulching</li> <li>Trench cum bunding</li> </ul>
Nutrient management (foliar nutrient sprays etc.)	Maize Finger millet	<ul> <li>Seed treatment with Bio- fertilizers         (Azosprillium 500g/ha for maize and         Rhizobium (500 g/ha) for pigeonpea</li> <li>Split application of nitrogenous fertilizers</li> <li>Foliar application of nutrients 19:19:19 and         KNO<sub>3</sub> (13:00:45) @ 5g/l of water</li> </ul>
Water management (Life saving irrigation from harvested water)	Maize Finger millet	<ul> <li>Irrigation through Sprinkler from farm ponds/wells</li> <li>Alternative furrow irrigation</li> </ul>

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Napier cross
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Finger millet (ML365 and GPU-48)
  - Horsegram (PHG-9/CRIDA-18 R) in August
  - Field bean (Avare) (HA-4)

KVK/District	: Dimapur
State	: Nagaland
Name of Village	: Dhansiripar
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 30 <sup>th</sup> May 2015
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for	r onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15th July or specify date)
Paddy	242.00	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of August.	Low lands Staggered variety Gitesh (old nursery of 70 days can also be transplanted), Medium lands RCM-5, RCM-9 and RCM- 11 (130-135 days)	After 15 <sup>th</sup> August Blackgram (KU-301 & Sesame)
Maize	21.00	2 <sup>nd</sup> week of May to 2 <sup>nd</sup> week of July	All Round hybrid	Blackgram (KU-301 & Sesame)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Paddy	Direct sowing
(intercropping etc.)	Paddy	Drum seeding
	Paddy	Transplanting of mature seedlings
	Maize	Re-sowing & Gap filling
Soil moisture management ( <i>in situ</i> conservation practices)	Colocassia	Paddy Straw mulching
Nutrient management (foliar nutrient sprays etc.)	-	-
Water management (Life saving irrigation from harvested water)	Maize	Live saving irrigation with sprinkler

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Utilizing fodder from perennial trees.
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Blackgram (KU-301)in the month of August
  - Greengram (Pratap)in the month of August
  - Toria (TS-38 7 M-27) in the month of September
  - Linseed (Parvati, Neelam & Sharda)in the month of September

KVK/District	: Gadag
State	: Karnataka
Name of Village	: Mahalingapur
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 1st week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

## 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	d Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Greengram	140	Up to June	Demonstration of DGGV-2 Greengram variety	<ul> <li>Demonstration of early duration Greengram (Selection-4) (Up to July 15<sup>th</sup>)</li> <li>Maize (Up to August 15<sup>th</sup>)</li> <li>Sunflower (Up to August 15<sup>th</sup>)</li> </ul>
Bt. Cotton	130	Up to July 15 <sup>th</sup>	-	<ul> <li>Onion (Arka Kalyan) for delayed sowing up to July 15th</li> <li>Sunflower</li> <li>Sesame (DS-5) early duration variety (Up to July 30th)</li> </ul>
Groundnut (Bunch)	50	Up to June	Kadiri-9 (Drought tolerant variety)	<ul> <li>Groundnut spreading type (JSP-39, early duration variety)</li> <li>Foxtail millet (DHFt-109-3) (Up to August 30<sup>th</sup>)</li> <li>Horsegram (GPM-6 variety) (Up to August/September 30<sup>th</sup>)</li> </ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop	Spreading	• Spreading Groundnut + Pigeonpea (TS-3R) (5:1)
management	Groundnut	• Maize + Pigeonpea (5:1)
(intercropping		• Foxtail millet + Pigeonpea (TS-3R) (3:1)
etc.)		8.1 [ ) ( )
Soil moisture	Greengram	• Seed treatment with CaCl <sub>2</sub> at 2%
management		• Compartmental bunding after sowing (25 DAS)
(in situ		Opening of conservation furrows @ 10 m interval
conservation	Pigeonpea	Seed treatment with CaCl <sub>2</sub> @ 2%
practices)		Nipping at 50 DAS
		Opening of conservation furrows 30 DAS
	Bunch	Paired row method of planting
	groundnut	Opening of conservation furrows
	Sunflower	Wider row spacing
		• Seed treatment with CaCl <sub>2</sub> at 2%
Nutrient management	Greengram	• Foliar spray of water soluble fertilizers during flowering stage 19:19:19 or 38:38:0 NPK @ 4 g/liter of water
(foliar nutrient sprays etc.)		• Foliar spray of water soluble fertilizer (19:19:19 NPK) at 4-10 g/liter of water
	Sunflower	• 19:19:19 NPK at 4 g/liter before flower opening stage
	Maize	• 19:19:19 NPK at 4 g/liter at before tassel opening
	Bt. Cotton	• KNO <sub>3</sub> 10 g/lit at square initiation & flowering
		• MgSO <sub>4</sub> at 80 DAS at 10 g/liter

Category	Crop (s)	Contingency measures for deficit rainfall condition
Water	-	-
management		
(Life saving		
irrigation from		
harvested		
water)		

3. List of fodder management demonstrations for livestock in contingency situations

#### <u>August</u>

- Perennial fodder Sorghum (CoFS-29)
- Fodder Maize (African Tall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Rabi Sorghum (M 351 variety) in September
  - Horsegram (GPM-6) from June end to September

KVK/District	: Godda
State	: Jharkhand
Name of Village	: Bhelwa and Gunghasa
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> to 20 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	60	Last week of June to 1 <sup>st</sup> week of July	Medium land Sahbhagi (110 days) Shatabadi (120 days)  Upland Heera (75 days)	After 15th August  Medium land  Greengram (Pusa Vishal/Improved)  Maize (Hybrid)  Upland  Blackgram (T- 9/ Improved)  Pigeonpea (Short duration)
Sweet potato	10	July	Kisan/S - 14	Pigeonpea (Short duration)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Elephant foot yam and Bitter Gourd	Elephant foot yam (Gajendra) + Bitter Gourd (US – 6214) in multilayer vegetable cropping system
	Paddy	Staggered community nursery (Sahbhagi, Shatabdi and Heera)
	Paddy	DSR, SRI
Soil moisture management ( <i>in situ</i> conservation practices)	Sweet potato	Ridge furrow
Nutrient management (foliar nutrient sprays etc.)	Paddy	Foliar application of PPFM during dry spell
	Blackgram	Foliar application of 1% Potassium nitrate
Water management (Life saving irrigation from harvested water)	Paddy	One or two irrigations at critical stages

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder maize (African tall)
  - Sorghum (M. P. Chari)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Kulthi (Horsegram) (Birsa Kulthi 1/Improved) in August
  - Mustard (Pusa Mustard 28) in September
  - Cauliflower (Early Snowball) in September
  - Potato (K. Joyoti ) in September

KVK/District	: Gumla
State	: Jharkhand
Name of Village	: Gunia
Climate vulnerability	: Drought, Heat wave
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June 2015
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

## 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing	Demonstration of	Demonstration of alternate crop	
	area	time	short duration/	and variety for delay in planting	
	(ha)		drought tolerant	(e.g., after 15th July or specify	
			varieties of	date)	
			normal crop		
Paddy	375	2 <sup>nd</sup> week	Uplands:	15th July to 25th July	
		of June to	Anjali (90 days),	• Raised bed nursery with Dapog	
		3rd week	Birsa Vikas Dhan	method and transplanting with	
		of July	109 (90-100	var. Abhishek, Lalat, Sahbhagi,	
			days),	MTU-1010, PAC-801 and	
			Virendra (90	DRRH-2	
			days)	Drum seeding of short duration varieties	
			<u>Medium</u>	Blackgram (Shekhar: 85-90	
			<u>lowlands:</u>	days, Birsa urd-1: 80-85 days)	
			Sahbhagi (115-	After 25th July	
			120 days),	DSR and aerobic rice in medium	
			Naveen, Abhishek	land (Lalat: 120-125 days),	
			(120 days), Lalat	Sahbhagi and Abhishek, BPT-	
			(120-125 days),	5204 (135-140 days), MTU-	
			MTU 1010 (110-	1010 (110-115 days) in lowland	
			115 days)	After 2nd August to 15th August	
				• Pigeonpea (Narendra Arhar-1:	
			Hybrid – PAC	230-235 days, Asha : 210-215	
			801,	days, Malviya-13: 230-235 days	
			DRRH- 2 (110 -	and Bahar: 240-250 days)	
			120 days)	After 15th August	
			T1 4	• Pigeonpea (Asha, Malviya-13	
			Lowlands:	Maize (Suwan-1)	
			BPT 5204 (135-	<ul> <li>Vegetables</li> </ul>	
			140 days),	• Pearl Millet (Pusa-23)	
Maize	30	2 <sup>nd</sup> week	Maize:	Up to 3rd July	
		of June to	Suwan-1 (95 -100	• Vivek Maize hybrid-39 (90-95	
		2st week of	3 //	days),	
		July	(95-100 days)	• HQPM-4 (70-75 days)	
				Alternate crops/ Management	
				• Maize (Suwan-1 (95-100) /	
				Vivek maize hybrid-39) +	
				Groundnut (Var. TG-22)	
				• Maize (Suwan-1)+	
				Pigeonpea(Malviya-13)	
				• Maize (Suwan-1) + Soybean(Var.	
				JS-80-21)	
				Maize (Suwan-1) + Lobia (Pusa	
				komal)	
				15 th July to 30 th July	
				• Pigeonpea (Malviya-13, Asha, Narendra Arhar-1)	
				• Finger millet (GPU-28)	
				• Kulthi (Birsa Kulthi-1)	

				After 30 th July  • Vegetables  • Niger (Var. Birsa niger-1, 2 &3)  • Buck wheat
Finger millet	10	2 <sup>nd</sup> week of June to 3 <sup>rd</sup> week of July	Finger millet (GPU-28) through transplanting (110 – 120 days)	After 30 th July Direct sowing of finger millet (GPU-28)  Niger (Var. Birsa niger-1, 2 & 3)  Kulthi (Birsa Kulthi-1)  Sweet Potato (Sakarkand-1)  Vegetables
Blackg ram	51	1st week of July to 4th week of July	Blackgram (Shekhar: 80 – 90 days)	After 30 th July  • Pigeonpea (Asha)  • Niger (Birsa niger-1, 2 & 3)  • Sweet Potato (Sakarkand-1)
Ground nut	40	2 <sup>rd</sup> week of June to 1 <sup>st</sup> week of July	Groundnut (TG- 22, BAU-25)	<ul> <li>After 30 th July</li> <li>Pigeonpea (Asha)</li> <li>Niger (Puja, Birsa niger-1, 2 &amp; 3)</li> <li>Sweet Potato (Sakarkand-1)</li> </ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Groundnut	Groundnut (BAU-25) + Pigeonpea (Malviya-13) (4:1)
	Pigeonpea	Pigeonpea (Asha) & Sorghum (Moti)
	Paddy	Staggered community nursery (Lalat) for transplanting correct aged seedlings
		Aerobic, Direct Seeded Rice, (Lalat)
		Brown manuring
		SRI
Soil moisture	Maize	Sowing with ridge furrow method
management (in situ conservation practices)	Paddy	Field bunding Green manuring with Dhaincha
Nutrient management	Paddy,	Urea spray @ 2%, Use of MOP in Paddy field
(foliar nutrient sprays)	Groundnut & Maize	Soil amendments with Gypsum & Dolomite
Water management (Life saving irrigation from harvested water)	Paddy	Protective irrigation through lift irrigation system & 5% model

- 3. List of fodder management demonstrations for livestock in contingency situations August/ September
  - Hybrid Napier
  - Sorghum (Moti)
  - Bajra (Giant)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Pigeonpea (Sarad)
  - Greengram (HUM-12)
  - Horsegram (Birsa Kulthi-1)
  - Cowpea (Pusa Barsati)
  - Mustard (Pusa Mahak, Shivani, NDR-8501)
  - Niger (Birsa Niger-1,2 & 3)
  - Toria (PT-306)
  - Kharif potato (Kufri kuber)
  - Okra (Arka anamika, Varsha Uphar, Sonam)
  - Cauliflower (Kuwari, Pusa Ketki & Pant subhra)
  - Pea (Arkel, Malviya mater-15 & Azad)
  - Faba bean (Vikrant)
  - Lentil (NDL-1& PL-406)
  - Linseed (Sekhar)
  - Wheat (K-9107, Pusa Chaitanya)

KVK/District	: Guna
State	: Madhya Pradesh
Name of Village	: Sarkho
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 3 <sup>rd</sup> week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency	y plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Soybean	968	3 <sup>rd</sup> week of June to 10 <sup>th</sup> July	JS-95-60 (85-90 days)	1st week of August Sesame (JT-11, 12)
Blackgram	136	1st to 15th July	Sekhar-2	Short duration variety (LBG-20)
Greengram	95	1 <sup>st</sup> to 15 <sup>th</sup> July	HUM-1	Sesame (TKG-21)
Pigeonpea	37	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	ICPL -88039	Short duration variety (Pragati)
Maize	22	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	HPQM - 1	Niger

2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Soybean, Blackgram, Greengram	Seed treatment with fungicide
Soil moisture management ( <i>in</i> situ conservation practices)	Soybean, Maize	Hoeing & weed mulching
Nutrient management	Soybean, Maize	Foliar application of water soluble fertilizer grade 19:19:19 (NPK) @ 3g/lit water
Water management (Life saving irrigation from harvested water)	Soybean, Maize	Life saving irrigation using sprinkler & drip

3. List of fodder management demonstrations for livestock in contingency situations

#### August/ September

- Fodder Sorghum (MP Chari)
- Fodder Maize (African Tall)
- Pearl millet (Bajra Chari)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Potato (Kufri Lauker, K. Jawahar) in September
  - Toria in September
  - Tomato (Hybrids) in August

KVK/District	: Hamirpur
State	: Uttar Pradesh
Name of Village	: Manki Khurd
Climate vulnerability	: Drought and Heat wave
Normal onset of Monsoon (date) at the	: 20 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency plan	n for onset delay
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Sorghum	45	Last week of June to 1 <sup>st</sup> week of July	Bundela,CSH- 16,CSH-9,CSH-14	Blackgram (Shekhar-3) Pigeonpea (Azad)
Pearl millet	40	Last week of July to 2 <sup>nd</sup> week of August	Raj-171,pusa-23 and hybrid	Greengram (Samrat)
Sesame	8	2 <sup>nd</sup> week of July to last Week July	Shekhar	Blackgram (Azad-2)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Sorghum	Sorghum (CSH-14) + Pigeonpea (Azad) (10:1)
Soil moisture management ( <i>in situ</i> conservation practices)	Pigeonpea	Ridge furrow method
Nutrient management (foliar	Sorghum	Foliar spray of 2% urea
nutrient sprays etc.)	Pearl millet	Foliar spray thiourea@1000ppm
Water management (Life saving irrigation from harvested water)	Millets	Life saving irrigation

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum (MP Chari)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Toria (T-9) in September
  - Potato (Kufri chipsona) in September (90-110 days)

KVK/District	: Imphal East
State	: Manipur
Name of Village	: Andro
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 7-10 June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Rice	1173	15 <sup>th</sup> June	Rice (CAU R3: 100 days)	Nursery raising up to 20th of July and transplanting till 13th of August Sweet potato (Shree Bhadra) Blackgram (T9-short duration)	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Rice	System of rice intensification and Integrated crop management
		practices
Soil moisture management (in	Sweet potato	Vegetative mulching
situ conservation practices)		
Nutrient management (foliar	Rice, Sweet	Integrated nutrient management
nutrient sprays etc.)	potato	with Azolla in rice, drip fertigation
		for sweet potato
Water management (Life saving	Blackgram	Protective irrigation through
irrigation from harvested water)	(T9)	sprinkler

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Oats (multi cut)
  - Hybrid Napier
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Utera cropping (Rice-wheat, Rice-Rapeseed mustard)
  - Early planting of Lentil
  - Early planting of Field pea (GS-36, HUDP-15)
  - Zero tillage cultivation of Lathyrus (Bio-L 212)

KVK/District	: Jalna
State	: Maharashtra
Name of Village	: Kadegaon
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 20 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

## 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Cotton (rainfed)	600	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Bt hybrids & varieties (NH-615, Suraj)	Cotton + Pigeonpea (BDN-708, 711) (6:2)	
Maize	100	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	Hybrids	Short duration hybrids	
Pearl Millet	75	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	MRH-204, PBH- 86	Shraddha, AIMP-93901, PPC-6	
Soybean	50	2 <sup>nd</sup> week of June to 3 <sup>rd</sup> week of July	MAUS-71, MAUS- 158, MAUS-162	Soybean (JS-93-05) + Pigeonpea (BDN-708, BDN-711) (4:2)	
Pigeonpea	30	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	BDN-708, BDN-711	Sole or intercrop (Soybean + Pigeonpea) (4:2)	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Cotton (Rainfed)	• Cotton + Soybean (1:1), Cotton + Green Gram (1:1), Cotton + Pigeonpea (6:2)
	Pigeonpea	<ul> <li>Pigeonpea + Soybean/ Greengram/ Blackgram (2:1 or 2:2)</li> </ul>
Soil moisture management (in situ	Cotton (rainfed)	Open conservation furrows
conservation practices)	Maize, Pearl millet, Pigeonpea	<ul> <li>Interculture</li> <li>Opening of alternate furrows with Balaram plough</li> <li>Mulching with crop residue</li> </ul>
	Soybean	<ul><li>Sowing with BBF planter</li><li>Opening of alternate furrows with Balaram plough</li></ul>
Nutrient management	Cotton (Rainfed)	<ul> <li>Foliar spray of 2 % urea or 1% water soluble fertilizers (19-19-19 or 20-20-20 or 10:26:26)</li> <li>Two sprays of 2% MgSO4, Zn, Boron in case of reddening symptoms</li> </ul>
	Maize, Pearl millet	<ul> <li>Foliar spray of 2% urea or DAP</li> <li>Foliar spray of 2% MOP at the time of cob emergence</li> </ul>
Water management (Life saving irrigation from harvested water)	Cotton (Rainfed)	Life saving irrigation at critical stages with drip

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Stylo (S. hamata) on bunds
  - Fodder Sorghum (Phule Godhan)
  - Fodder Maize (African Tall)
  - Rainfed grasses Ginni Grass, Pavna
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Safflower (PBNS-12, PBNS-40)
  - Rabi Sorghum (Parbhani Moti, M-35-1)
  - Kabuli Chana for green pods (PKV-2, PKV-4)
  - Seed production of French beans
  - Cluster bean in August

KVK/District	: Jehanabad
State	: Bihar
Name of Village	: Sakrorha
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation  $\frac{1}{2}$ 

#### 1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	175	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	<u>Upland</u> • Sahbhagi	After 15th July Upland Paddy (Prabhat) Sesame (Krishna) Pigeonpea (p-9) Soybean (JS-95-60, JS-93-05) Blackgram (Azad-3) Medium lowland Finger millet (A-404, GPU-28,RAU-03) After 15th august Upland Horsegram (BR-5, BR-10) Maize (Sabour Shanker Makka-3) Pigeonpea (P-9,Sarad) Toria (RAUTS-17) Medium lowland Greengram (Samrat, Pusavishal)
Pigeonpea	5	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	NDA-1 Malviya-13	-

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	Staggered community nursery (R.Sweta, Sahbhagi, Sabour Ardhajal) Direct Seeded Rice in upland (Sahbhagi, Prabhat)
	Pigeonpea + Maize	Pigeonpea (NDA-1, Malviya-13) Maize (Saktiman)
	Pigeonpea+ Finger millet	Pigeonpea (NDA-1,Malviya-13) Finger millet (A-404, RAU-03, GPU-28)
Soil moisture management (in situ conservation practices)	Pigeonpea	Ridge – furrow method

Nutrient management (foliar nutrient sprays etc.)	Paddy	Brown manuring in paddy
	Paddy	Foliar Spray of 2% urea
	Pigeonpea	Foliar spray of thiourea @ 1000 ppm
	Blackgram	Foliar spray of 1 % potassium nitrate
	Sorghum	Foliar spray of 2% urea
Water management (Life saving irrigation from harvested water)	Paddy	Protective irrigation from pond

3. List of fodder management demonstrations for livestock in contingency situations

## August/ September

- Fodder maize (African Tall)
- Cowpea (Lobia-88, KashiKanchan)
  Fodder sorghum (Co FS-29)
- Hybrid Napier (IGFRI-6)
- Bajra (Chari-2)
- 4. Early rabi crop plan for demonstration (for planting in kharif unsown areas during August/ September in the village)
  - Kulthi (BR-5, BR-10) in August
  - Toria (RAUTS-17) in September
  - Maize (Shaktiman, Sabourshanker Makka-3 (70-75 days) in September
  - Early Potato (Kufri pukhraj, K. Ashoka) in September

KVK/District	: Jhansi
State	: Uttar Pradesh
Name of Village	: Gandhi Nagar (Garhmau)
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 20 <sup>th</sup> to 22 <sup>nd</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown	sowing	Demonstration of	Demonstration of
	area	time	short duration/	alternate crop and variety
	(ha)		drought tolerant	for delay in planting (e.g.,
			varieties of normal	after 15th July or specify
			crop	date)
Groundnut	85	4th week of	Groundnut:	15 <sup>th</sup> to 30 <sup>th</sup> July
		June to 1st	Jhunku/Indauri	Sesame (Shekhar)
		week of	(130-135 days)	
		July		
Blackgram	5	2 <sup>nd</sup> week of	Azad Urd-2, Azad	15th July to 15th August
		July	Urd-3	Sesame

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Groundnut	Groundnut (TG-37A) + Greengram (PDM-139, SML-668)
Soil moisture management ( <i>in</i> situ conservation practices)	Groundnut	Ridge furrow method
Nutrient management (foliar nutrient sprays etc.)	Groundnut	Foliar spray of micronutrients
Water management (Life saving irrigation from harvested water)	Groundnut	Protective irrigation through sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder (M.P.Chari)
  - Fodder Maize (African tall)
  - Cowpea (BL-1, BL-2)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during Aug/ Sept in the village)
  - Toria (Bhavani) after 15<sup>th</sup> September
  - Ageti Rai Mustard (Narendra Ageti Rai-4, 100-105 days) in September

KVK/District	: Jhunjhunu
State	: Rajasthan
Name of Village	: Bharu
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 25 <sup>th</sup> June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency	plan for onset delay
crops	sown	time	Demonstration of	Demonstration of
	area (ha)		short duration/ drought tolerant	alternate crop and variety for delay in
	,		varieties of normal crop	planting (e.g., after 15 <sup>th</sup> July or specify date)
Pearl millet	295	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	RHB- 173	Cowpea (RC-19)
Cluster bean	97	4 <sup>th</sup> week of June to 4 <sup>th</sup> week of July	RGC-1066	Pearl millet (HHB-60/67)
Greengram	28	1 <sup>st</sup> week of July to 4 <sup>th</sup> week of July	RMG-344	Moth bean (RMO-40)
Cowpea	110	1 <sup>st</sup> week of July to 4 <sup>th</sup> week of July	RC-19	Conserve moisture for Rabi crops

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pearl millet	• Pearl millet + Greengram (2:5)
Soil moisture management (in situ conservation practices)	Pearl millet, Cluster bean, Greengram & Cowpea	Interculture
Nutrient management (foliar nutrient sprays etc.)	Pearl millet, Cluster bean, Greengram	<ul> <li>Foliar spray of Urea 2%</li> <li>Foliar spray of Thio urea @ 0.1% &amp; 0.05%</li> </ul>
Water management (Life saving irrigation from harvested water)	Pearl millet & Cluster bean	• Protective irrigation through sprinkler

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum Chari (MFSH-4)
  - Pearl millet Chari (RBC-2)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during Aug/ Sept in the village)
  - Gram (GNG-1581) in first week of October
  - Rai mustard (Modki local variety) in last week of September in rainfed area
  - Rapeseed mustard (RGN-229,RH-749) in first week of October

KVK/District	: Jodhpur
State	: Rajasthan
Name of Village	: Purkhawas
Climate vulnerability	: Drought, Heat wave
Normal onset of Monsoon (date) at the location	: Last week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area	sowing	Demonstration of	Demonstration of
	(ha)	time	short duration/	alternate crop and
			drought tolerant	variety for delay in
			varieties of normal	planting (e.g., after 15 <sup>th</sup>
			crop	July or specify date)
Pearl millet	560	4th week	HHB-67 (Improved)	Moth bean (RMO-
Moth bean	230	of June	RMO-435,CZM-2	435,CZM-2)
Cluster	105	to 2 <sup>nd</sup>	RGC-936, RGC 1017	• Cluster bean (RGC-
bean		week of		936, RGC 1017)
Greengram	30	July	GM-4	
Sesame	15		RT -127	
Pearl millet	560		HHB-67 (Improved)	

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pearl millet	• Pearl millet(HHB-67 imp)+Moth bean (RMO-435,CZM-2)
	Greengram Cluster bean	• Greengram (GM-4) + Cluster bean (RGC-936)
Soil moisture management (in situ conservation practices)	Pearl millet Moth bean Cluster bean Greengram	<ul> <li>Summer deep ploughing (increase water holding capacity)</li> <li>Weeding and vegetative mulch.</li> <li>Open furrow sowing</li> </ul>
Nutrient management (foliar nutrient sprays etc.)	Pearl millet	Foliar spray of thiourea @ 500 ppm
Water management (Life saving irrigation from harvested water)	-	-

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Dhaman grass (CAZRI- 358)
  - Sorghum (Raj Chari 2)
  - Fodder enrichment
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Taramira (RTM-314)

KVK/District	: Kalahandi
State	: Odisha
Name of Village	: Pipalpada
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 25 <sup>th</sup> June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Cotton	80	1 <sup>st</sup> week of July	Early maturing hybrids	Line sowing of     Blackgram (Prasad)     during last week of July	
Paddy	25	July 15 <sup>th</sup> to August 25	Short duration paddy variety (Naveen)	• Sowing of short duration paddy variety Sahbhagi Dhan with drum seeder	
Blackgram	12	2 <sup>nd</sup> week of August	Line sowing of Blackgram (Prasad) till last week of August	<ul><li>Horsegram in upland situation</li><li>Cowpea (Utkalmanik)</li></ul>	
Pigeonpea	10	3 <sup>rd</sup> week of July	Line sowing of Arhar (Asha)	• Sowing of short duration Arhar (IPC 161, IPC 70239)	
Maize	05	2 <sup>nd</sup> week of August	Hybrid Maize	• Inter cropping of Maize + Cowpea (2:2)	

Category	Crop (s)	Contingency measures for deficit rainfall condition	
Crop management (intercropping etc.)	Paddy	<ul> <li>Direct Seeded Rice, line sowing in uplands (Sahbhagi dhan)</li> <li>Drum seeding in shallow lowlands (MTU-1010)</li> </ul>	
	Cotton	<ul><li>Cotton + Pigeonpea (6:2)</li><li>High density planting</li></ul>	
	Blackgram	• Pigeonpea + Blackgram (6:1)	
Soil moisture management (in situ conservation practices)	Maize Cotton	<ul><li>Ridge furrow method of planting</li><li>Incorporation of sunhemp within 15 days after sowing</li></ul>	
Nutrient management (foliar nutrient sprays etc.)	Blackgram	• Foliar spray of Planofix 0.1 % at 2ml/10 liter of water	
	Paddy	• Foliar application of 2% Zinc	
Water management (Life saving irrigation from harvested water)	Paddy	Live saving irrigation	

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder maize (African Tall)
  - Cowpea (Co-5)
  - Hybrid Napier
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Kulthi (horsegram) (Local) in August
  - Greengram (Durga) in last week of September
  - Maize (Shakti) in 2nd week of September

KVK/District	: Kalburgi (Gulbarga)
State	: Karnataka
Name of Village	: Ambalga
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: June 2 <sup>nd</sup> week
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal crops	Normal	Normal	Contingency plan for onset delay	
	sown	sowing time	Demonstration of	Demonstration of
	area		short duration/	alternate crop and
	(ha)		drought tolerant	variety for delay in
			varieties of	planting (e.g., after
			normal crop	15 <sup>th</sup> July or specify
				date)
Pigeonpea	166	June 2 <sup>nd</sup> to	TS3R (145-155	Pigeonpea short
(Medium		July 1st week	days), GRG-811	duration varieties
duration)			(164 days)	(TS3R)
Soybean	81	June 2 <sup>nd</sup> week to July 1 <sup>st</sup> week	JS-335	Horsegram (GPM-6)
Blackgram/Green	81	June 2 <sup>nd</sup>	Du-1, BGS-9	Sunflower (RFSH-130,
gram		week		Kargil-41)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pigeonpea	Seed hardening treatment with Calcium Chloride for short duration TS3R variety
Soil moisture management (in situ conservation practices)	Pigeonpea	<ul><li>Mulching between rows with Greengram waste</li><li>Opening of conservation furrows after ten rows of Pigeonpea</li></ul>
Nutrient management (foliar nutrient sprays etc.)	Pigeonpea	• Foliar spray of 19:19:19 (0.2%)
Water management (Life saving irrigation from harvested water)	Soybean	Protective irrigation using tanker (water spray)

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (African Tall
  - Pigeonpea + Pearl millet (1:2)
  - Sorghum + Pigeonpea (2:1)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Sunflower (RFSH-130) in August to September and Kargil-41 in September (95-100 days)
  - Horsegram (GPM-6) in August (120 days)
  - Sorghum (35, JP-1-5) in August-September (105-110 days duration)

KVK/District	:	Khammam
State	:	Telangana
Name of Village	:	Nacharam
Climate vulnerability	:	Drought
Normal onset of Monsoon (date) at the location	:	1st week of June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Conting	gency plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Cotton	750	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of August	Bt - Hybrids	<ul> <li>15th to 31st July</li> <li>Cut-off date for cotton sowing in Khammam district is 20th July</li> <li>Sowing till end of July by adopting closer spacing of 90 x 30 cm</li> <li>1st to 15th August</li> <li>Pigeonpea (LRG-41) (with closer spacing (45-90 x 10 cm)</li> <li>Maize till 1st week with short duration hybrids under irrigated conditions</li> <li>Sesame (Swetha and Rajeswari) till 15th August</li> </ul>
Paddy	200	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> Week of July	Siddi (WGL-44)	1st to 15th August Direct Seeding Rice (Drum seeding and broadcasting) with short duration varieties

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping	Cotton	Cotton + Pigeonpea (7:1)
etc.)	Paddy	Direct Seeded Rice with short duration varieties
Soil moisture management ( <i>in situ</i> conservation practices)	Cotton	Ridge and furrow method
Nutrient management (foliar	Cotton	Foliar spray of 2% potassium nitrate
nutrient sprays etc.)	Paddy	Foliar application of 2% zinc sulphate
Water management (Life saving irrigation from harvested water)	Chilli	Mulching practice with drip irrigation

- 3. List of fodder management demonstrations for livestock in contingency situations August/September
  - Sugargraze
  - Tanjania
  - Cowpea
  - APBN-1
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Maghi Sorghum varieties & Hybrids (MJ-278, M35-1,NTJ-1, 2, 3, 4N N-13 & 14, CSH-16)
  - Pigeonpea (with closer spacing- 45-90 cm x 10 cm)
  - Castor (Kranthi, Jyothi, Jwala, PCH-111,PCH-222)
  - Blackgram (LBG-623, WBG-26, LBG-20)
  - Sunflower (Modern var./ hybrids) in heavy soils

KVK/District	: Koderma
State	: Jharkhand
Name of Village	: Chopanadih
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June 2015
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency pla	an for onset delay
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15th July or specify date)
Paddy	130	2 <sup>nd</sup> week of June (Nursery), 2 <sup>nd</sup> week of August (Transplanting)	Upland Anjali (90 days) Medium lowland Sahbhagi dhan (115 days) Abhishek (120 days)	Upland  Blackgram  Pigeonpea
Pigeonpea	12	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	Narendra Arhar-1 Bahar (270 days)	<ul><li>Blackgram</li><li>Pigeonpea</li></ul>
Finger millet	5	2 <sup>nd</sup> week of June	Birsa Mandua-1	<ul><li>Blackgram</li><li>Pigeonpea</li></ul>
Maize	5	June	HQPM-1 (110 days)	<ul><li>Blackgram</li><li>Pigeonpea</li></ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition	
Crop management (intercropping etc.)	Pigeonpea	Pigeonpea (NA-1) + Blackgram (PU-31)	
	Paddy	Staggered community nursery (Sahbhagi Dhan & Abhishek)	
		Direct Seeded Rice, line sowing in upland (Anjali)	
Soil moisture management (in situ conservation practices)	Paddy	-	
Nutrient management (foliar nutrient sprays etc.)	Paddy	Balanced fertilization (K application in rice) & foliar application in pulses	
Weed control in DSR	Paddy	Use of bispyribac sodium (herbicide)	
Water management (Life saving irrigation from harvested water)	Vegetable crops	Poly mulching and sprinkler irrigation	

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum
  - Maize
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Horsegram (Birsa Kulthi-1) in August
  - Toria (PT 303) in mid September
  - Niger (BN1) in mid September
  - Early Rai Mustard (Pusa agrani) in September

KVK/District	: Kurnool
State	: Andhra Pradesh
Name of Village	: Yagantipalle
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

#### 1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing time	Contingency pl	lan for onset delay
crops	sown area (ha)		Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Foxtail millet	80	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> Week of July	SIA-3085, Sreelakshmi	SIA-3088 (Suryanandi)
Pigeonpea	92	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> Week of July	LRG-41, ICPL- 87119	Pigeonpea (PRG- 158,PRG-100) at close spacing
Maize	45	2 <sup>nd</sup> Week of June to 1 <sup>st</sup> week of July	Hybrids	Hybrids
Cotton	40	2 <sup>nd</sup> Week of June to 2 <sup>nd</sup> week of July	Bt-cotton	Closer spacing with Bt-cotton
Paddy	30	Nursery raising in july2 <sup>nd</sup> & 3 <sup>rd</sup> week	BPT-5204	<ul> <li>Short duration variety: RNR-1446 (DSR)</li> <li>Maize, Sunflower</li> </ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Setaria	Finger millet (SIA-3088) + Pigeonpea (PRG-158) (5:1) Castor + Pigeonpea (1:1)
Soil moisture management (in situ conservation practices)	Castor	Opening of conservation furrows between two castor rows at 30-35 DAS
	Pigeonpea	Deep open furrows laid in between two castor rows
	Maize & Cotton	Ridge and furrow method
Nutrient management	Cotton	Foliar spray of 2% urea/ 1% of Kno <sub>3</sub>
(foliar nutrient sprays etc.)	Pigeonpea	Foliar spray of 2% urea
Water management (Life saving irrigation from harvested water)	Pigeonpea Maize	Protective irrigation through sprinklers

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Perennial green fodder in 125 acres, maintaining buffer stock of sorghum and Paddy straw
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Setaria (Suryanandi), Castor (Haritha)
  - Maghi Sorghum (NTJ-1, 2, 4); Horsegram (PHG-62, PZM-1); Fodder Sorghum; early sowing of Chickpea (Nandyal sanaga-1, JG-11, JAKI-9218), Kabuli (ICCV-2, KAK2, ICGV-95311)

KVK/District	Kutch	
State	Gujara	at
Name of Village	Bhalot	t
Climate vulnerability	Scanty	y rainfall
Normal onset of Monsoon (date) at the location	20th J1	une

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal crops	Normal	Normal	Contingency plan for onset delay		
	sown area	sowing	Demonstration of	Demonstration of	
	(ha)	time	short duration/	alternate crop and	
			drought tolerant	variety for delay in	
			varieties of normal	planting (e.g., after 15 <sup>th</sup>	
			crop	July or specify date)	
Cotton	200	$1^{ m st} \& 2^{ m nd}$	Bt hybrids	• Castor	
	(Irrigated)	week of		• Cluster bean	
		June		Greengram     Fadden agestum	
Sesame	60		Guj Til-3	<ul><li>Fodder sorghum</li><li>Fodder sorghum</li></ul>	
Sesame	00		Guj III-0	<ul><li>Cluster bean</li></ul>	
				Greengram	
Castor	232		GCH-2, 7	Fodder sorghum	
Pearl millet	50		GHB 538	Fodder sorghum	
				• COFS-27 & Gundri	
Cluster bean	204		GG-2	• Fodder sorghum (COFS-27 & Gundri)	
Fodder	84	1st week of	COFS-27 &	-	
sorghum	(Irrigated) 104	Aug	Gundri		
	(Rainfed)				

Category	Crop (s)	Contingency measures for
Catogory	Crop (o)	deficit rainfall condition
Crop management	Cotton	• Cotton + Greengram (2:2)
(intercropping etc.)		
Soil moisture	Cotton, Sesame, Castor,	<ul> <li>Sowing of crop across the</li> </ul>
management (in situ	Pearl millet, Greengram,	slope and interculture
conservation practices)	Fodder Sorghum	
Nutrient management	Cotton	Foliar Spray of NPK
(foliar nutrient sprays		(19:19:19)
etc.)		Fertigation through drip
Water management (Life	Cotton, Sesame, Castor,	Life saving irrigation from
saving irrigation from	Pearl millet, Greengram,	recharged open wells
harvested water)	Fodder Sorghum	

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (COFS-27 and Gundri)
  - Perennial Grass (APBN-1)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Lucerne
  - Sesame (semi-rabi, Purva-1), Cumin (GC-4) with rains in September rains)
  - Fodder Sorghum (Solapuri)

KVK/District	: Morena
State	: Madhya Pradesh
Name of Village	: Jigni, Nidhan
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 10 <sup>th</sup> to 15 <sup>th</sup> June

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

	1. Contingency crop plan for delay in planting			
Normal	Normal	Normal sowing	Contingency plan for onset delay	
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Soybean	15	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	JS-95-60, JS-335	<ul> <li>After 3<sup>rd</sup> week of July</li> <li>Pigeonpea (ICPL 88039)</li> <li>Pearl millet</li> </ul>
Short duration Pigeonpea	50	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	Pigeonpea (UPAS 120, PUSA 992, ICPL-8803)	<ul><li>Pearl millet</li><li>Maize</li><li>Sesame (JTS-8)</li></ul>
Maize	15	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	Hybrid	-
Pearl millet	65	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	Pearl millet (JVB 3, ICTP-8203, HHB 447)	_
Blackgram	15	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	Blackgram (Uttara, Shekhar , PU-35)	-
Greengram	15	2 <sup>nd</sup> week of June & 3 <sup>rd</sup> week of July	Greengram (JM 721, TJM 3, TM 99-37, SML 668)	<u>-</u>
Cluster bean	50	1st week of June & 3rd week of July	Cluster bean (RGC 1038, HG 365, HG 563)	<ul><li>Pearl millet</li><li>Pigeonpea (Pusa 991, 992)</li></ul>

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Soybean, Pigeonpea	<ul> <li>Soybean (JS-9560) + Pigeonpea (ICPL88039)</li> <li>Pigeonpea (ICPL88039 + Maize (hybrid)</li> </ul>
Soil moisture management ( <i>in situ</i> conservation practices)	Pigeonpea , Soybean, Pearl millet, Blackgram, Greengram, Cluster bean	<ul><li>BBF, Raised bed furrow</li><li>Line sowing method</li><li>Mulching</li></ul>
Nutrient management (foliar nutrient sprays etc.)	Pigeonpea, Soybean, Pearl millet, Blackgram, Greengram, Cluster bean	<ul> <li>Spray 2% urea or MOP during the dry spell</li> <li>Foliar spray of 2% Urea, DAP and KNO3</li> </ul>
Water management	Soybean	Life saving irrigation

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (African tall)
  - Fodder Sorghum (MP-Chari)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Toria (JT-1, Bhawani, T-9, PT-303)
  - Potato in 2<sup>nd</sup> week of September

KVK/District	: Nalgonda
State	: Telangana
Name of Village	: Nandyalagudem
Climate vulnerability	: Drought and Heat wave
Normal onset of Monsoon (date) at the	: June 2 <sup>nd</sup> week
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingen	cy plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15th July or specify date)
Cotton	180	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of July	Bt cotton Hybrids	<ul> <li>After 1st week of August</li> <li>Castor (Kiran, PCH-111)</li> <li>Cowpea (C-152, UPC-5286)</li> </ul>
Pigeonpea	39	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	PRG-176	• Horsegram (VHG-6, PZM-1)
Paddy	32	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	RNR-15048, MTU-1010	Direct sowing with drum seeder
Greengram	25	1 <sup>st</sup> week of June to 4 <sup>th</sup> week of August	MGG-295, WGG- 42	<ul> <li>Castor (Kiran, PCH-111)</li> <li>Cowpea (C-152, UPC-5286)</li> <li>Horsegram (VHG-6, PZM-1)</li> </ul>
Chilies, Other vegetables & Mulberry	24	2 <sup>nd</sup> week of June to 4 <sup>th</sup> week of August	Hybrids and varieties	Leafy vegetables

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Bt Cotton Paddy	<ul> <li>Bt Cotton + Pigeonpea (PRG-176) (10:1)</li> <li>Direct sowing with drum seeder (RNR-15048 &amp; MTU-1010</li> </ul>
Soil moisture management ( <i>in situ</i> conservation practices)	Bt Cotton, Pigeonpea	• Conservation furrows after 35 to 40 DAS
Nutrient management (foliar nutrient sprays etc.)	Bt cotton Pigeonpea	• Foliar spray of 2% Urea and 1% potassium nitrate
Water management (Life saving irrigation from harvested water)	Chilies and other vegetables	Drip irrigation

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (SHG-1 and UP chary-1 & 2)
  - Fodder Maize (African Tall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Sorghum (CSV-31, CSV-5, CSH-9)
  - Cowpea (C-152, UPC-5286)
  - Horsegram (VHG-6, PZM-1)

KVK/District	: Namakkal
State	: Tamilnadu
Name of Village	: Vadavathur
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 1 <sup>st</sup> week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency pl	an for onset delay
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15th July or specify date)
Small onion for seed purpose	60	2 <sup>nd</sup> week of May to 4 <sup>th</sup> week of July	Small onion 90 days (excluding nursery)	Sorghum (Paiyur-2)
Groundnut	128	2 <sup>nd</sup> week of July to 3 <sup>rd</sup> week of August	Groundnut (CO-6) (125-130 days)	Blackgram (CO-6) after 3 <sup>rd</sup> week in August
Sorghum	225	2 <sup>nd</sup> week of July to 3 <sup>rd</sup> week of August	Sorghum (Paiyur- 2) (90 -100 days)	Fodder Sorghum (CoFS 29)
Black gram	8	2 <sup>nd</sup> week of July to 4 <sup>th</sup> week of July	Blackgram (CO-6) (60 -65 days)	Green manuring crops: Daincha and Sunhemp
Green gram	11	2 <sup>nd</sup> week of July to 4 <sup>th</sup> week of July	Greengram (VBN.3) (65 -70 days)	Green manuring crops: Daincha and Sunhemp

#### 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management	Groundnut	• Groundnut (CO-6) +Pigeonpea (CO-7)
(intercropping etc.)	Groundnut	• Groundnut (CO-6) + Castor (YRCH-1)
Soil moisture management (in situ conservation practices)	Small onion	<ul><li>Deep tillage using chisel plough</li><li>Ridge and furrow method of planting</li></ul>
Nutrient management (foliar nutrient sprays etc.)	Groundnut	• Groundnut rich 2 Kg/acre
Water management (Life saving irrigation from	Groundnut	Protective irrigation through water tanker and mobile sprinkler
harvested water)	Small onion	<ul> <li>Protective irrigation through water tanker and mobile sprinkler</li> </ul>

3. List of fodder management demonstrations for livestock in contingency situations

## August/September

- Fodder Sorghum (CoFS-29), Agathi, Subabul
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Groundnut (CO-6) in August (2<sup>nd</sup> or 3<sup>rd</sup> week)
  - Seed onion (CO-5) in nursery in October (3<sup>rd</sup> week), planting in December 1<sup>st</sup> week (40 days old seedlings)
  - Vegetable crops (Ridge gourd, Bitter gourd and Tomato) in September

KVK/District	: Nandurbar
State	: Maharashtra
Name of Village	: Umarani
Climate vulnerability	: Drought, Heat stress
Normal onset of Monsoon (date) at the	: June 2 <sup>nd</sup> Week
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing	Demonstration of	Demonstration of	
	area (ha)	time	short duration/	alternate crop and variety	
			drought tolerant	for delay in planting (e.g.,	
			varieties of normal	after 15th July or specify	
			crop	date)	
Sorghum	140	June 2 <sup>nd</sup> week	Hybrids	Pearl millet (Hybrid)	
Maize	118	June 2 <sup>nd</sup> week	GM-6 (75-80 days)	GM-6 (75-80 days)	
Soybean	40	June 2 <sup>nd</sup> week	JS-93-05 (90 days)	Pearl millet (Hybrid)	
Blackgram	57	June 2 <sup>nd</sup> week	TPU-4	Horsegram (Phule Sakas)	
Pigeonpea	40	June 2 <sup>nd</sup> week	ICPL-87 (110-130 days)	Inter cropping of Pigeonpea + Pearl millet (Hybrid)	

Category	Crop (s)	Contingency measures for deficit rainfall condition	
Crop management (intercropping etc.)	Setaria	• Setaria + Pigeonpea (5:1)	
	Groundnut	Border plantation of castor to control leaf eating caterpillar (Groundnut + Soybean)	
	Sorghum	• Increase seed rate, seed treatment to control shoot fly damage	
Soil moisture management (in situ conservation practices)	Maize	Ridge and furrow method	
Nutrient management (foliar nutrient sprays etc.)	Sorghum, Pearl millet	• Foliar spray of 2% urea	
Water management (Life	Groundnut	• Protective irrigation through sprinklers	
saving irrigation from harvested water)	Soybean	Protective irrigation through sprinklers	

- 3. List of fodder management demonstrations for livestock in contingency situations August/ September
  - Fodder sorghum (CoFS-29)
  - Fodder maize (African Tall)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Kulthi (Horsegram) (Phule Sakas) in August
  - Vegetables
  - Chickpea (Digvijay, Vijay) in September
  - Potato (Kufri Jyoti, 90-100 days) in November

KVK/District	: Nawadah
State	: Bihar
Name of Village	: Manjhila
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)	
Paddy	40	4 <sup>th</sup> week of May to 4 <sup>th</sup> week of June	Sahbhagi, Prabhat Heera, Susk Samrat, Naveen	Pigeonpea (MAL-13, PRG158) Blackgram (Uttara)	
Pigeonpea	46	4 <sup>th</sup> week of June	MAL 13, ICPL- 88039	Kulthi (Birsa-1) Finger millet (RM-2)	
Maize	7	4 <sup>th</sup> week of June	GK3017, DMH849	Brinjal (Swarna Pratibha) Tomato (S-27, Lakshmi & Abhilash)	

2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	• Staggered nursery, seedlings of 40-45 days for transplanting with 4-5 seedlings/ hill
	Pigeonpea	Higher seed rate
	Maize	Gap filling
Soil moisture	Paddy	Direct Seeded Rice, Line sowing
management (in situ conservation practices)	Pigeonpea	<ul><li>Application of potash at final land preparation</li><li>Weed mulching for moisture conservation</li></ul>
	Maize	<ul><li>Application of potash at final land preparation</li><li>Weed mulching for moisture conservation</li></ul>
Nutrient management (foliar nutrient sprays etc.)	Paddy, Maize, Pigeonpea	Potassic fertilizer spray
Water management	Paddy	Protective irrigation from well and pond
(Life saving irrigation from	Pigeonpea	
harvested water)	Maize	

3. List of fodder management demonstrations for livestock in contingency situations

# August/ September

- Fodder Sorghum
- Fodder Maize
- Cowpea, Sudan grass
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Kulthi (Horsegram) (Birsa -1) in August
  - Toria (Bhawani, Panchali, Pusa Tarak) in September
  - Agetirai mustard (Pusa Agrani, Pusa Mahak) in September

KVK/District	: Palamu
State	: Jharkhand
Name of Village	: Dulsulma & Murma
Climate vulnerability	: Drought, Heat wave
Normal onset of Monsoon (date) at the	: 20 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency	plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	90	15 <sup>th</sup> June to 30 <sup>th</sup> July	Sahbhagi, Naveen	Direct Seeded Rice
Maize	50	15 <sup>th</sup> June to 30 <sup>th</sup> July	HQPM-1	Maize + Sesame
Pigeonpea	60	15 <sup>th</sup> June to 30 <sup>th</sup> July	Birsa Arhar-1	Medium land Pigeonpea, Blackgram
Sesame	20	15 <sup>th</sup> June to 30 <sup>th</sup> July	Kanke Safed	Sesame, Blackgram
Finger millet		15 <sup>th</sup> June to 30 <sup>th</sup> July	A-404	<u>Upland &amp; Medium land</u> Finger millet

Category	Crop (s)	Contingency measures for deficit rainfall condition		
Crop management (intercropping etc.)	Maize	Maize (HQPM-1) + Sesame (Kanke Safed)		
	Pigeonpea	Pigeonpea (Narendra Arhar-1) + Maize (HQPM-1)		
Soil moisture management (in situ conservation practices)	Turmeric	Mulching in Turmeric		
Nutrient management (foliar	Paddy	Foliar spray of 2% urea		
nutrient sprays etc.)	Maize	Foliar spray of 2% urea		
	Pigeonpea	Foliar spray of 2% urea		
Water management (Life saving irrigation from harvested water)	Paddy	Life saving irrigation through dobha		

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Maize (HQPM-1) in August
  - Sorghum (Pusa Chari-23) in August
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during Aug/ Sept in the village)
  - Horsegram (Birsa Kulthi-1) in August
  - Toria (T-9) in September
  - Mustard (Shivani) in September

KVK/District	: Rajkot	
State	: Gujarat	
Name of Village	: Magharwada	
Climate vulnerability	: Drought	
Normal onset of Monsoon (date) at the location	: 18 <sup>th</sup> to 25 <sup>th</sup> June	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency	plan for onset delay
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Soybean	200	2 <sup>nd</sup> week of June to 2 <sup>nd</sup> week of July	JS 95-60 (90 days) JS 97-52 (100 days)	<ul> <li>Blackgram (PU-31, Pratap Urd-1)</li> <li>Greengram (SML 668,IPM 02-03)</li> <li>Sesame (RT 346, 351)</li> <li>Maize (Pratap Hybrid 1)</li> </ul>
Groundnut	100	3 <sup>rd</sup> week of June	GG-20	• GG-5 (90 days)
Cotton	600	3 <sup>rd</sup> week of June	Bt Cotton hybrids	Early maturing cultivars
Pulses	20	3 <sup>rd</sup> week of June	Blackgram (Pratap Urd-1) Greengram (G-4)	<ul><li>Blackgram (Pratap Urd-1</li><li>Greengram (G-4)</li></ul>
Castor	20	1 <sup>st</sup> week of August	Castor (GAUC-3)	-
Sesame	60	3 <sup>rd</sup> week of June	Sesame (G-2) Sesame (G-3)	-

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Maize	• Cotton + Maize (1:1)
Soil moisture management (in situ conservation practices)	Cotton Groundnut Sesame	Sowing by broad bed furrow (BBF) method
Nutrient management (foliar nutrient sprays etc.)	Cotton	<ul><li>Foliar spray of 1 % Potassium nitrate</li><li>Foliar spray of 2% urea</li></ul>
Water management (Life saving irrigation from harvested water)	Cotton Groundnut	<ul><li> Alternate furrow irrigation</li><li> One irrigation through rain gun</li></ul>

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Sorghum
  - Hybrid Napier Bajra (APBN-1)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - No scope for *rabi* cropping because of unavailability of underground water

KVK/District	: Ratlam
State	: Madhya Pradesh
Name of Village	: Amba
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: Last week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing	Contingency	plan for onset delay
crops	sown area (ha)	time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Soybean	1400	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> week of July	JS-95-60, JS-93- 05	<ul><li>Greengram (T-1, JS-721)</li><li>Blackgram (JU-86, JU-</li></ul>
Cotton	85	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> week of July	Bt. Cotton hybrids	3) • Maize (JM-8, JM-11, JM-216)
Maize	32	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> week of July	JM-8, JM-12, Hybrids	<ul><li>Ashwagandha (WS-10- 134)</li><li>Tulsi (Kapoor Tulsi,</li></ul>
Blackgram	8	3 <sup>rd</sup> week of June to 2 <sup>nd</sup> week of July	JU-86, JU-3	Shyam Tulsi)

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Soybean	<ul> <li>Soybean (JS-9560, JS-9305) + Maize (hybrid, JM-8, JM-12) (4:2)</li> <li>Soybean (JS-9560, JS-9305) + Cotton (Bt Cotton) (4:2)</li> </ul>
Soil moisture management ( <i>in situ</i> conservation practices)	Soybean	Ridge & furrow method, BBF
Nutrient management (foliar nutrient sprays etc.)	Maize, Cotton	<ul><li>Foliar spray of 2% urea.</li><li>Foliar spray of liquid / soluble fertilizer</li></ul>
Water management (Life saving irrigation from harvested water)	Cotton	Protective irrigation through drip

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Maize (African tall)
  - Cowpea (Kohinoor)
  - Sorghum (MP Chari, Pusa Chari 6)
  - Hybrid Napier (Co-3)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Pea (Arkel, PSM-3)
  - Mustard (Pusa Agrani, Pusa Tarak)
  - Ashwagandha (WS-10-134)
  - Cucurbits

KVK/District	: Senapati
State	: Manipur
Name of Village	: Hengbung & Hengbung-1
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 15 <sup>th</sup> June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Paddy	21	2 <sup>nd</sup> week of June -1 <sup>st</sup> week of July	<ul><li>CAU-R3</li><li>Pariphou</li></ul>	Blackgram (T-9)

## 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	Direct Seeded Rice, SRI
Soil moisture management ( <i>in situ</i> conservation practices)	Paddy	Terrace (bench) rice cultivation
Nutrient management (foliar nutrient sprays etc.)	Paddy	Foliar application of urea @ 2%
Water management (Life saving irrigation from harvested water)	Groundnut	Protective irrigation through sprinkler

3. List of fodder management demonstrations for livestock in contingency situations

#### August/September

- Fodder Cowpea (BL-1)
- Fodder ricebean (Bidhan-2)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Rapeseed (TS-36) in September
  - Ricebean in August
  - Blackgram (T-9) in August
  - Potato (Kufri Kanchan) in September

KVK/District	: Tumkur (Hirehalli)
State	: Karnataka
Name of Village	: D. Nagenahalli
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 1 <sup>st</sup> Week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal sowing time	Contingency plan for onset delay	
crops	sown		Demonstration	Demonstration of
	area		of short	alternate crop and
	(ha)		duration/	variety for delay in
			drought	planting (e.g., after
			tolerant	15 <sup>th</sup> July or specify
			varieties of	date)
			normal crop	
Groundnut	39	4th week of May to	ICGV-9114	-
		2 <sup>nd</sup> week of July		
Finger	99	4th week of June to	ML-365	ML-365 (105 days)
millet		2 <sup>nd</sup> week of July		
Pigeonpea	10	2 <sup>nd</sup> week of June 1 <sup>st</sup>	BRG -2/ BRG-4	BRG -2 / BRG-4 (150
		week of July		days)
Paddy	13	1st week of July to	Aerobic Paddy	-
		2 <sup>nd</sup> week of July	(MAS-26)	
Maize	9	4th week of May to	Hybrids	-
		2 <sup>nd</sup> week of June		

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Pigeonpea Finger millet Groundnut	<ul> <li>Finger millet (ML365) + Pigeonpea (BRG4) (4:1)</li> <li>Groundnut (ICGV 91114) + Pigeonpea (BRG4) (4:1)</li> </ul>
Soil moisture management (in situ conservation practices)	Finger millet, Groundnut, Pigeonpea	Sowing across slope
Nutrient management (foliar nutrient sprays etc.)	Paddy	• Foliar spray of Zn (0.5-1%)
Water management (Life saving irrigation from harvested water)	Aerobic Paddy, Groundnut	Sprinkler irrigation

- 3. List of fodder management demonstrations for livestock in contingency situations
  - Fodder Sorghum (CoFS-29)
  - Guinea grass (Hemil)
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Horsegram (PHG9/CRIDA-18R) in August
  - Foxtail millets (Navane) in August

KVK/District	: Villupuram
State	: Tamil Nadu
Name of Village	: Kattusiviri
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the location	: 1st Week of July

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

1. Contingency crop plan for delay in planting					
Normal	Normal	Normal	Contingency plan for onset delay		
crops	sown	sowing	Demonstration of short	Demonstration of alternate	
	area	time	duration/ drought	crop and variety for delay in	
	(ha)		tolerant varieties of normal crop	planting (e.g., after 15th July or specify date)	
Groundnut	67	July 1st	Drought tolerant	• Cumbu (CoCu 9)	
		week	Groundnut varieties (TMV 7 and TMV13)	• Finger millet (Co 15)	
Blackgram	10	July 1 <sup>st</sup> week	Short duration variety (MDU 1)	• Vegetable cowpea (PKM 1) as catch crop	
Gourds	5	July 1 <sup>st</sup> week	Bottle gourd (CO (BG) H1)	-	
Brinjal	4	July 1 <sup>st</sup> week	Co-2	• Amaranthus (Co-1 & Co-2)	

2. Demonstration of agronomic measures					
Category	Crop (s)	Contingency measures for deficit rainfall condition			
Crop management (intercropping etc.)	Groundnut	• Groundnut (TMV 7 & 13) + Pigeonpea (BSR 1) (6:1).			
Soil moisture management (in situ conservation practices)	Groundnut, Blackgram	• Growing of fodder grasses <i>viz.</i> , Kollukatti grass, Guinea grass on bunds			
	Bottle gourd – CO (BG) H 1	<ul><li>Broad bed furrow planting</li><li>Mulching</li></ul>			
	Chilli Hybrid - Co 1	Mulching with drip irrigation			
Nutrient management (foliar nutrient sprays etc.)	Blackgram	<ul> <li>Foliar spray of Pulse wonder</li> <li>Foliar spray of KCl (0.5-1%) if prolonged dry spell of more than two weeks</li> </ul>			
	Groundnut	Foliar spray of Groundnut rich formula			
	Brinjal	<ul> <li>Foliar spray of vegetable special</li> <li>Foliar spray of KCl (0.5-1%) if prolonged dry spell of more than two weeks</li> </ul>			
Water management (Life saving irrigation from harvested water)	Chilli	Mulching			
	Groundnut	Mobile sprinkler method of irrigation			

- 3. List of fodder management demonstrations for livestock in contingency situations <u>August/September</u>
  - Fodder Sorghum (CoFS-29)
  - Anjan grass
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Horsegram and Moth bean in 4<sup>th</sup> week of November to 1<sup>st</sup> week of December in drylands
  - Groundnut or Blackgram depending on availability of water during first week of December in garden lands
  - Paddy late Samba and Navarai, short duration rice varieties recommended (ADT 36, ADT 37, ADT 39 and ADT 45)

KVK/District	: West Garo Hills
State	: Meghalaya
Name of Village	: Marapara, Sananggre & Rongbokgre
Climate vulnerability	: Drought
Normal onset of Monsoon (date) at the	: 1st week of June
location	

Agriculture contingency measures for implementation in NICRA village in case of delay in onset of monsoon/ deficit rainfall situation

1. Contingency crop plan for delay in planting

Normal	Normal	Normal	Contingency plan for onset delay	
crops	sown area (ha)	sowing time	Demonstration of short duration/ drought tolerant varieties of normal crop	Demonstration of alternate crop and variety for delay in planting (e.g., after 15 <sup>th</sup> July or specify date)
Rice	29	2 <sup>nd</sup> week to 4 <sup>th</sup> week of June	Gitesh (150-160 days)	<ul><li>After 15 August</li><li>Blackgram (Kalindi)</li><li>Greengram (Samrat)</li></ul>

## 2. Demonstration of agronomic measures

Category	Crop (s)	Contingency measures for deficit rainfall condition
Crop management (intercropping etc.)	Paddy	Staggered nursery (Gitesh)
Soil moisture management ( <i>in</i> situ conservation practices)	-	-
Nutrient management	Paddy	Foliar spray of 1% urea+ 1% MoP
Water management (Life saving irrigation from harvested water)	Winter Vegetables	Irrigation using harvested water from Jalkund

- 3. List of fodder management demonstrations for livestock in contingency situations
- 4. Early *rabi* crop plan for demonstration (for planting in *kharif* unsown areas during August/ September in the village)
  - Blackgram (Kalindi) in September
  - Greengram (Samrat) in September
  - Raised and sunken bed (Maize + Frenchbean/ Vegetable)

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