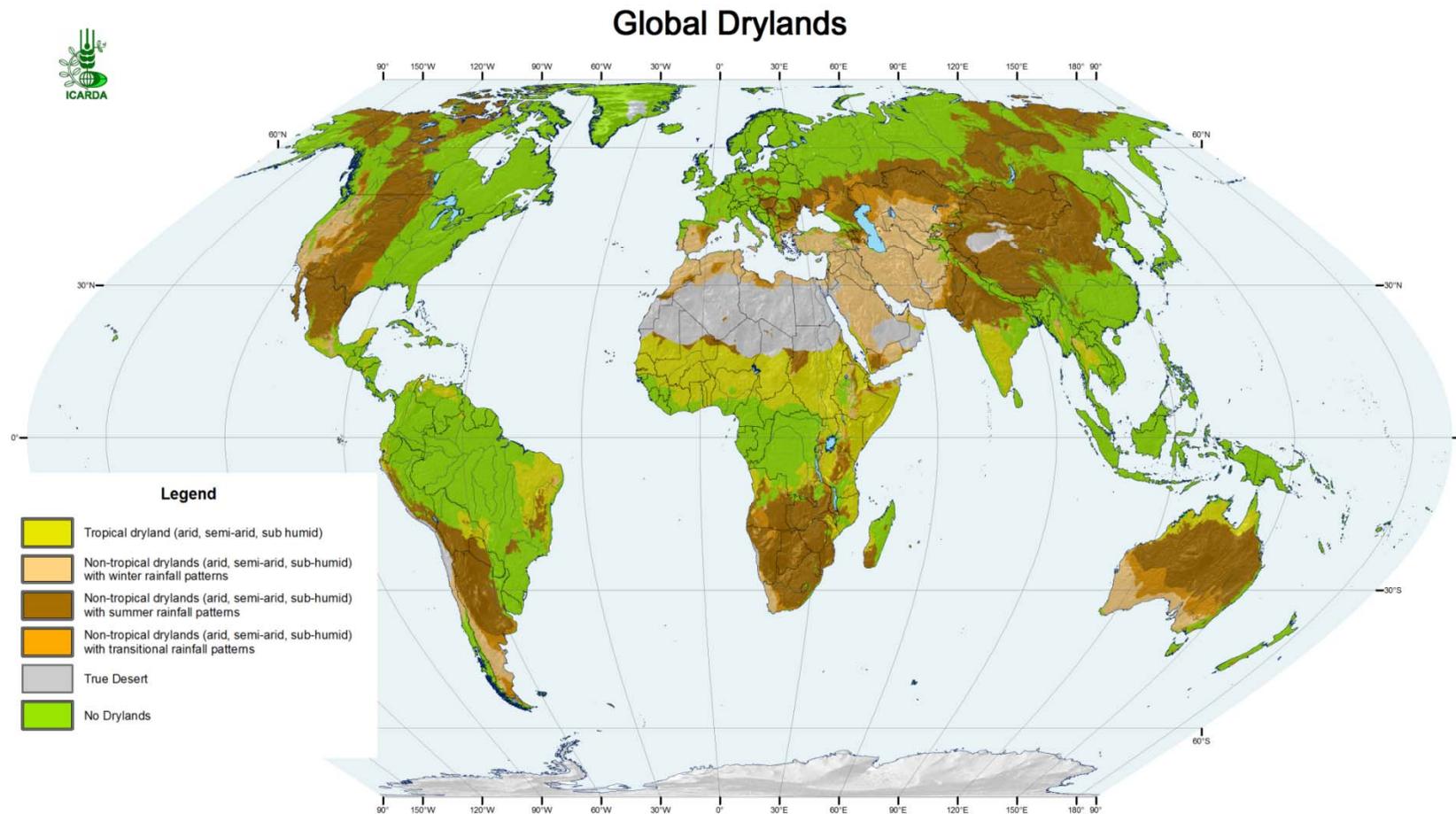


# Scientific content of CRP1.1 & Progress in the Inception Phase

Dry areas = water scarcity, limited and vulnerable natural resources, climatic variability, and a diverse and complex mix of pastoral, agro-pastoral, mixed rainfed and irrigated production systems requiring an **integrated agro-ecosystems approach** to research for development



Map prepared by GIS Unit, ICARDA, 2010. Author: E. De Pauw. GIS handling: L. Atassi, I. Yuldasheva

Sources: Trabucco et al, Hijmans, R.J., S.E. Cameron, J.L. Parra, P.G. Jones and A. Jarvis, 2005. Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology 25: 1965-1978. (<http://www.worldclim.org/current/>)

Eckert VI pseudo-cylindrical equal-area projection

# Global partners in the design & development of CRP1.1 (8+ Stakeholder Workshops)

## International centers

ICARDA	Bioversity	FAO	ILRI	WorldFish
ICRISAT	CIAT	ICBA	IWMI	
AVRDC	CIP	ICRAF	Sub-Saharan Africa CP	

## International and regional fora

AARINENA	CACAARI	FORAGRO
ASARECA	CORAF/WECARD	GFAR
APAARI	FARA	

## National research organizations

Afghanistan: MAIL  
 Bangladesh: BARI  
 Brazil: EMBRAPA  
 Burkina Faso: INERA  
 China: CAAS  
 Egypt: ARC  
 Ethiopia: EIAR, Arba Minch University  
 France: CIRAD  
 Ghana: ARI, CSIR  
 India: ICAR, CRIDA, CAZRI, FES, NRAA,  
 Watershed Organization Trust  
 Iran: AREEO  
 Jordan: NCARE  
 Kazakhstan: South-Western Scientific  
 Production Center of Agriculture

Kenya: KARI  
 Mali: INSAH/CILSS  
 Morocco: INRA  
 Niger: INRAN  
 Nigeria: ARC  
 Pakistan: BARI, CSO, PARC, SSD  
 South Africa: CSIR, Univ. of Ft Hare, WRC  
 Sudan: ARC  
 Syria: GCSAR, Agha Khan Foundation  
 Tajikistan: TAAS  
 Tunisia: IRA  
 Turkmenistan: National Farmers' Association, NAS  
 Turkey: AARI  
 USA: USDA  
 Uzbekistan: Kashkadarya Research Institute  
 Zambia: University of Zambia



## CRP1.1: Integrated and Sustainable Agricultural Production Systems for Improved Food Security and Livelihoods in Dry Areas

Learning, growing, spiral impact pathway

1. **Traditional research-for-development impact pathway includes four steps: research, outputs, outcomes and impact.**
2. **CRP1.1 views these steps not as a linear sequence, but as an upward spiral of learning and growing.**
3. **This results in an iterative research cycle, with continuous improvement in technologies.**



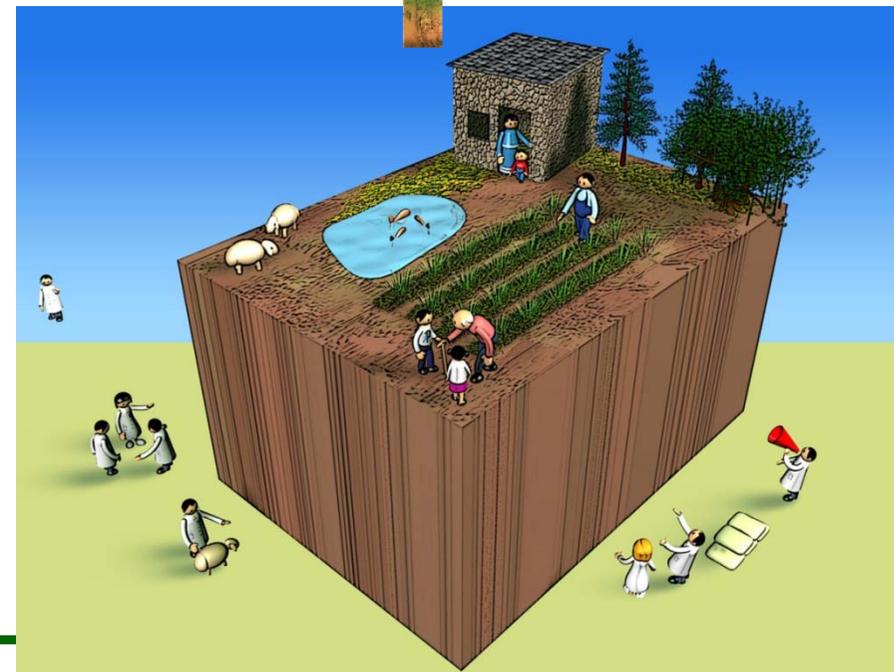
# “Following the Impact pathway backwards” (in proposal)

CRP Objective / Operational level	Information needed	Performance targets
<b>GOAL / IMPACT</b>	Characterization of Action Sites in terms of the System Level Outcomes (SLO)	<i>Performance Targets</i>
	<p><b>System Level Outcomes:</b></p> <ul style="list-style-type: none"> <li>• <i>Reduce rural poverty:</i> Number of poor and spatial distribution .... other indicators?</li> <li>• <i>Increase food security:</i> Food Insecurity Index ..... other indicators?</li> <li>• <i>Improve nutrition and health:</i> Number of undernourished children ... other indicators?</li> <li>• <i>Ensure more sustainable management of natural resources:</i> soil, water, agrobiodiversity, grasslands.....other indicators?</li> </ul>	
<b>OUTCOMES</b>	Defining Hypotheses / Research Questions, by Action Site in each Target Region	<i>Partners / Indicators</i>
	<i>Examples:</i>	
<b>OUTPUTS</b>	Defining research deliverables, by Action site, within each Target area	<i>Partners/ Indicators</i>
	<i>Examples:</i>	
<b>ACTIVITIES</b>	Defining research activities, at each Action Site	<i>Milestones</i>
	<i>Examples:</i>	
<b>RESEARCH AGENDA</b>	Defining research strategy	<i>Methodology</i>
	<i>Examples:</i>	

## CRP1.1 Integrated and Sustainable Agricultural Production Systems for Improved Food Security and Livelihoods in Dry Areas

A systems approach for sustainable, profitable dryland agro-ecosystems

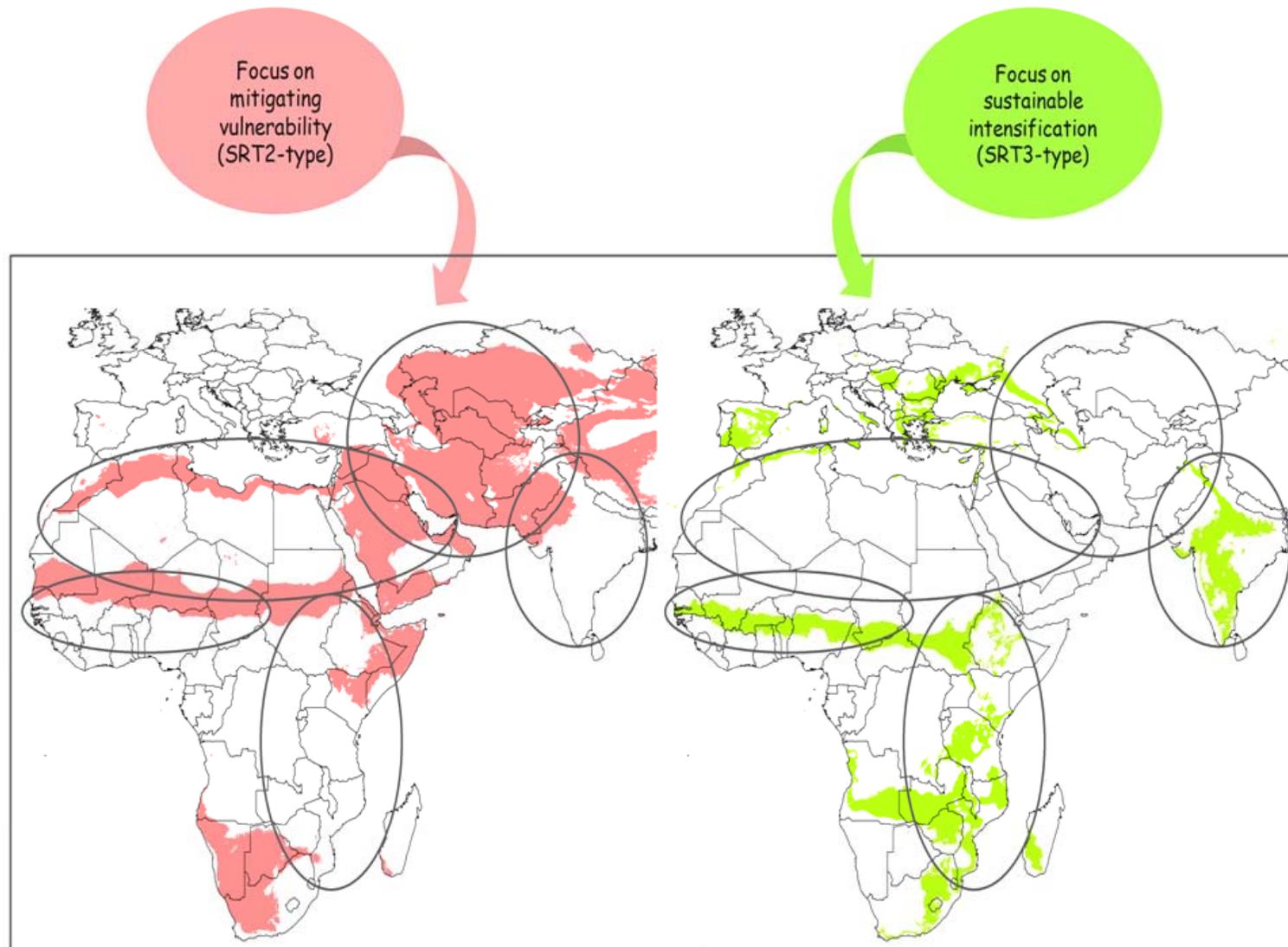
1. Much research focuses on individual components of an ecosystem, in isolation, in a reductionist way. This leads to limited impacts on the ground (bottom). = **LOW LEVEL OF INTEGRATION**
2. Dryland agro-ecosystem' farmers' reality involves complex and dynamic relationships between multiple components: soil, water, crops, vegetables, livestock, trees, fish ... and people. = **HIGH LEVEL OF INTEGRATION**
3. Researchers should join farmers, livestock keepers, foresters, and fishers, focusing on integrated systems. Then understanding increases, research becomes demand-driven, and outputs are aligned to user's needs.



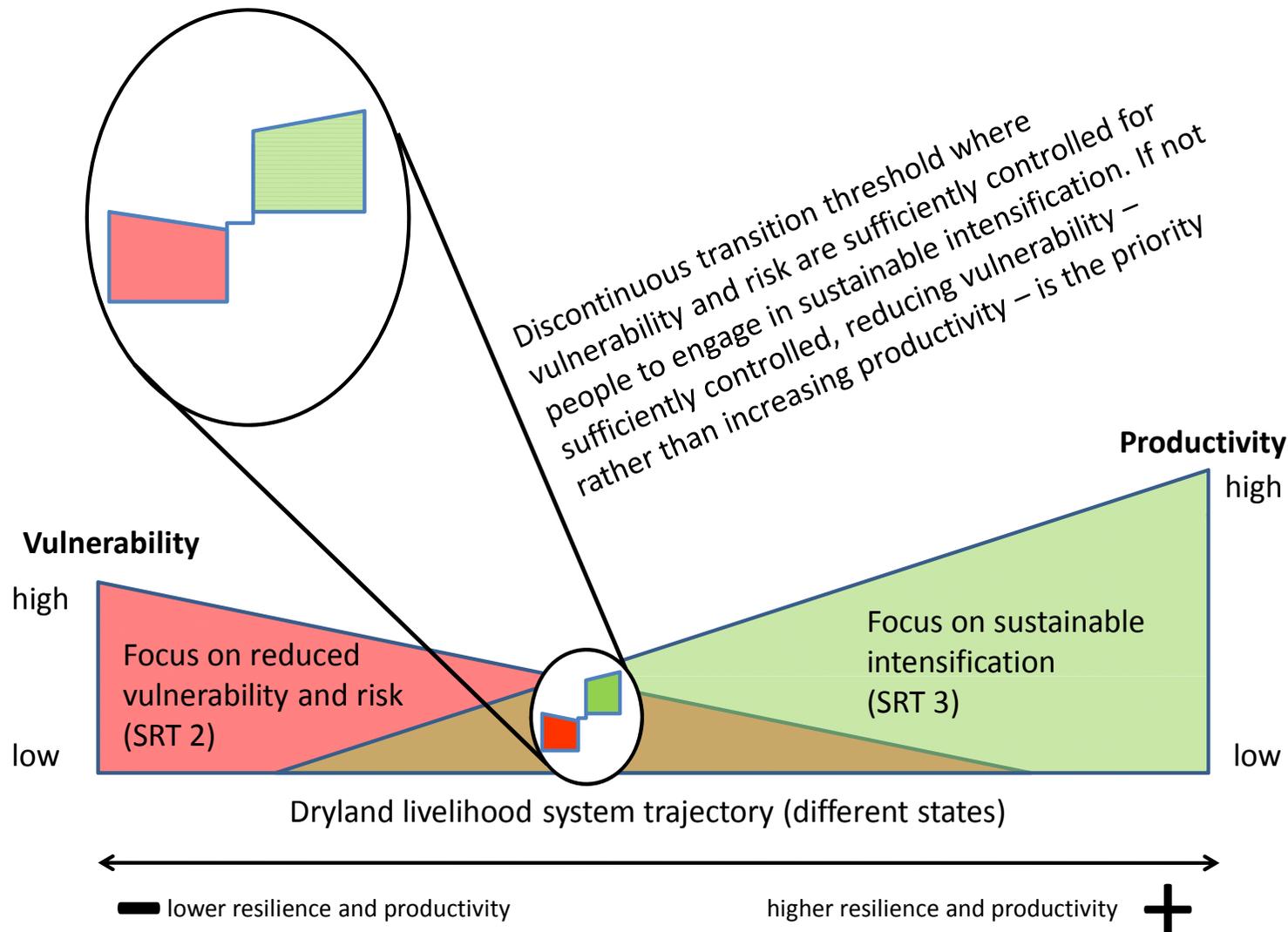
## CRP1.1 / Dryland Systems focuses on two agro-ecosystems

1. Reducing vulnerability
2. Sustainable intensification

Circles/ovals indicate the 5 Target Regions.



# Distinction between focus on reduced vulnerability and risk and focus on sustainable intensification : there are transition zones



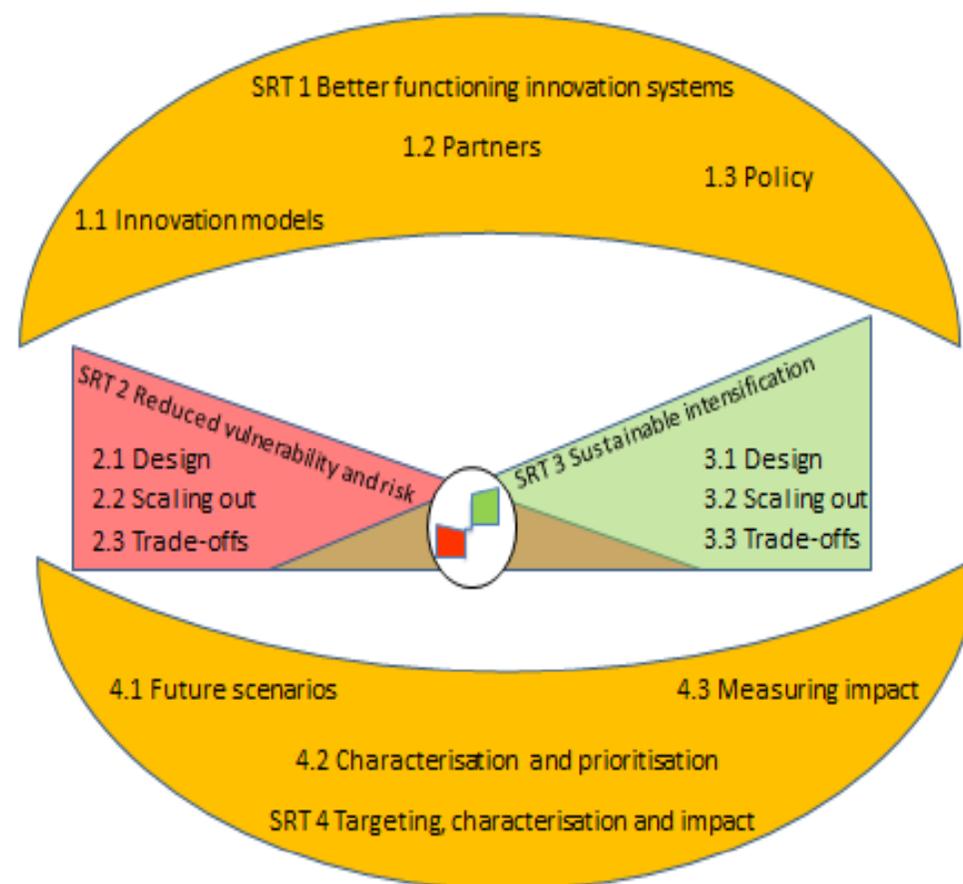
## Overview of CRP1.1 Strategic Research Themes (SRTs) and their outputs

*SRT1: Approaches and models for strengthening innovation systems, building stakeholder innovation capacity, and linking knowledge to policy action*

*SRT2: Reducing vulnerability and managing risk*

*SRT3: Sustainable intensification for more productive, profitable and diversified dryland agriculture with well-established linkages to markets*

*SRT4: Measuring impacts and cross-regional synthesis*



# What's New?

- **Integrated approach at landscape, system and community levels**
- **Scale: global, integrating regional programs of CG Centers and other CRPs & partners**
- **Within 5 Target Regions: Target Areas with Action Sites (1) and Satellite Sites (1-2)**
- **Research on effective partnership strategies, linking research-to-development**

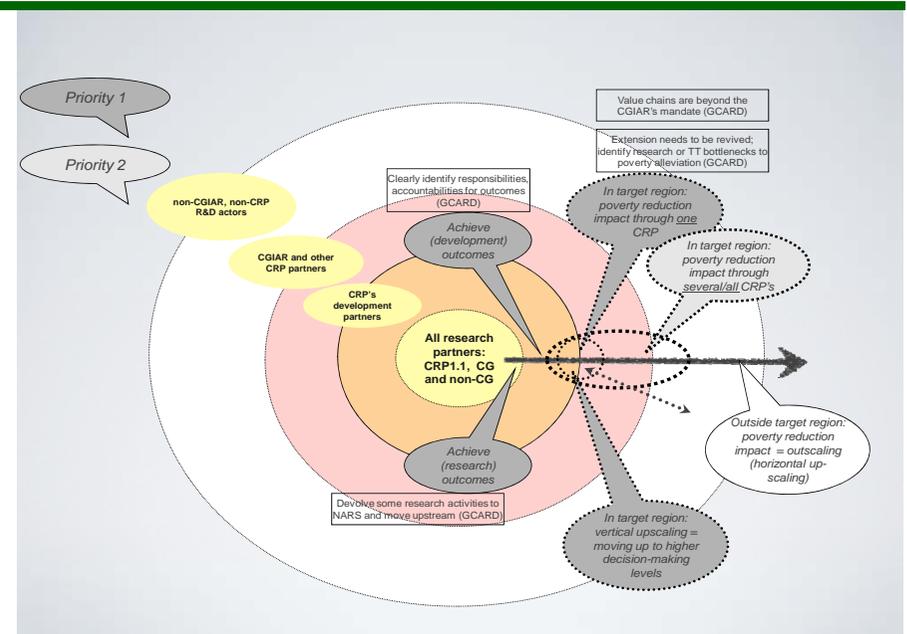


# Partnerships

**Principle:** CRP1.1 will use flexible, inclusive partnership arrangements to provide the expertise needed at each stage of the impact pathway.

## Partners:

- 9 CG Centers (ICARDA, ICRISAT, Bioversity, CIAT, CIP, ICRAF, ILRI, IWMI, WorldFish)
- Sub-Saharan Africa Challenge Program
- National agricultural research institutions & regional fora
- Extension services
- Community organizations and rural institutions (e.g. Farmers Associations, Water Users Associations)
- Advanced research institutes in the North and the South
- Private sector
- NGOs, CSOs
- Development agencies



# Partnerships and relations with other CRPs

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## Alignment with national agendas

1. Links to **national development strategies** through national policy & decision-makers
2. **Monitoring and evaluation process:** measurable indicators and milestones, in accordance with Governments' goals

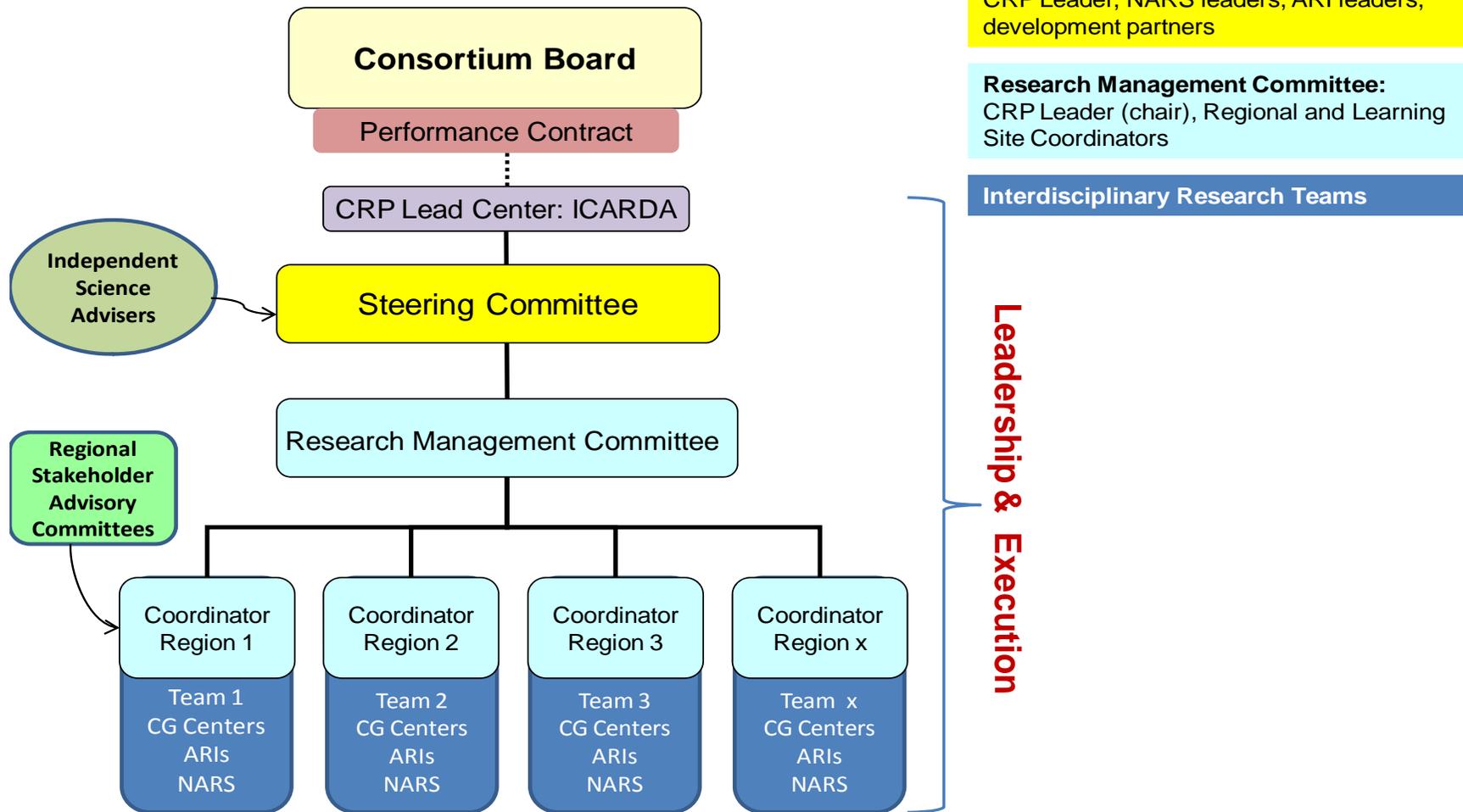
## Collaboration with other CRPs:

1. **CRP1.1 will utilize outputs from other CRPs** within its Target Regions, and will benefit from information, knowledge and tools developed by other CRPs
2. **CRP1.1 will provide other CRPs with feedback** on their outputs' performance in integrated agro-ecosystems



# Governance and management

## Organization of CRP1.1



## Criteria for choice of Target Areas & applied to proposed Action Sites

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Characteristics of potential action sites in Target Area  
(maximum 3/country)

Target Area	Potential Action Site 1	Potential Satellite Site 1	Potential Satellite Site 2
Country			
Geographical location			
Accessibility			
Potential for hypothesis testing			
Representativeness			
Potential for out-scaling (impact)			
Potential to attract funds			
Potential to interact with CRPs			

## Characterization of Target Regions, Target Areas and Action Sites

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Criteria for dryland Action Site characterization (non-exhaustive list)

Criteria	Limits for SRT 2	Limits for SRT 3
Length of growing period	<90 days	90-180 days
Distribution of poverty		
Hunger and malnutrition (food security, no of people, % of people)		
Aridity Index	0.03 to 0.35	0.35-0.65
Environmental risk (Rainfall variability, access to irrigation,	CV>15%	CV<15%
Land degradation(soil salinity, soil erosion)	High	Low-medium
Market access	Travel time >2 hrs	Travel time <2 hrs
Population density		

**DURING GROUND-WORK LIST WAS GREATLY EXPANDED AND DETAILED.**

# Target Areas and Action Sites: West Africa and Dry Savannas

CRP1.1 - Continental West African Sahel and Dry Savannas:  
Extent of SRT2 (reducing vulnerability) and  
SRT3 (sustainable intensification) domains

20.7 % of regional SRT area

43.4 % of country area

Action Sites / Benchmark Areas:

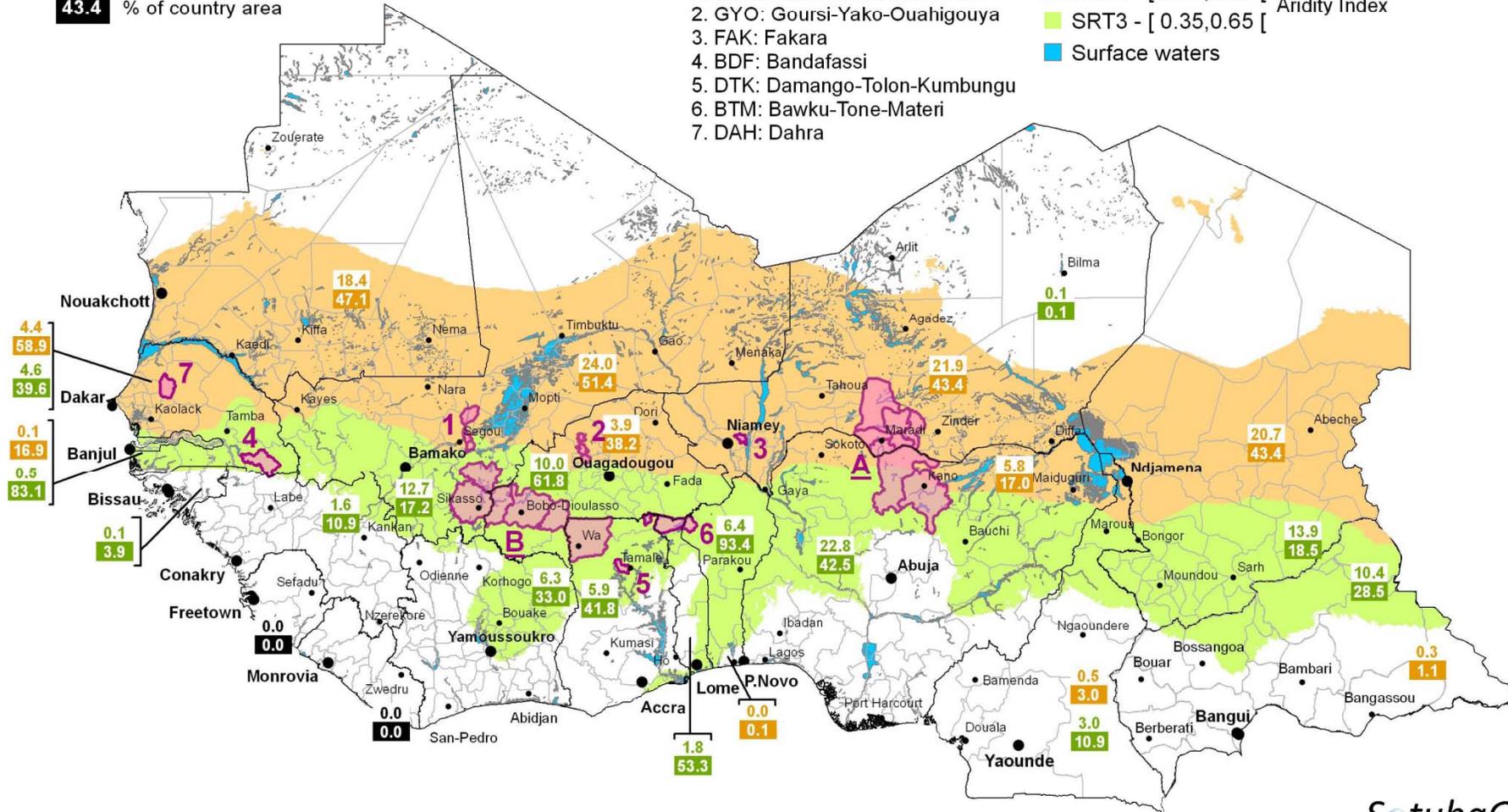
- A. KKM: Kano-Katsina-Maradi
- B. WBS: Wa-Bobo Dioulasso-Sikassc

Satellite Sites:

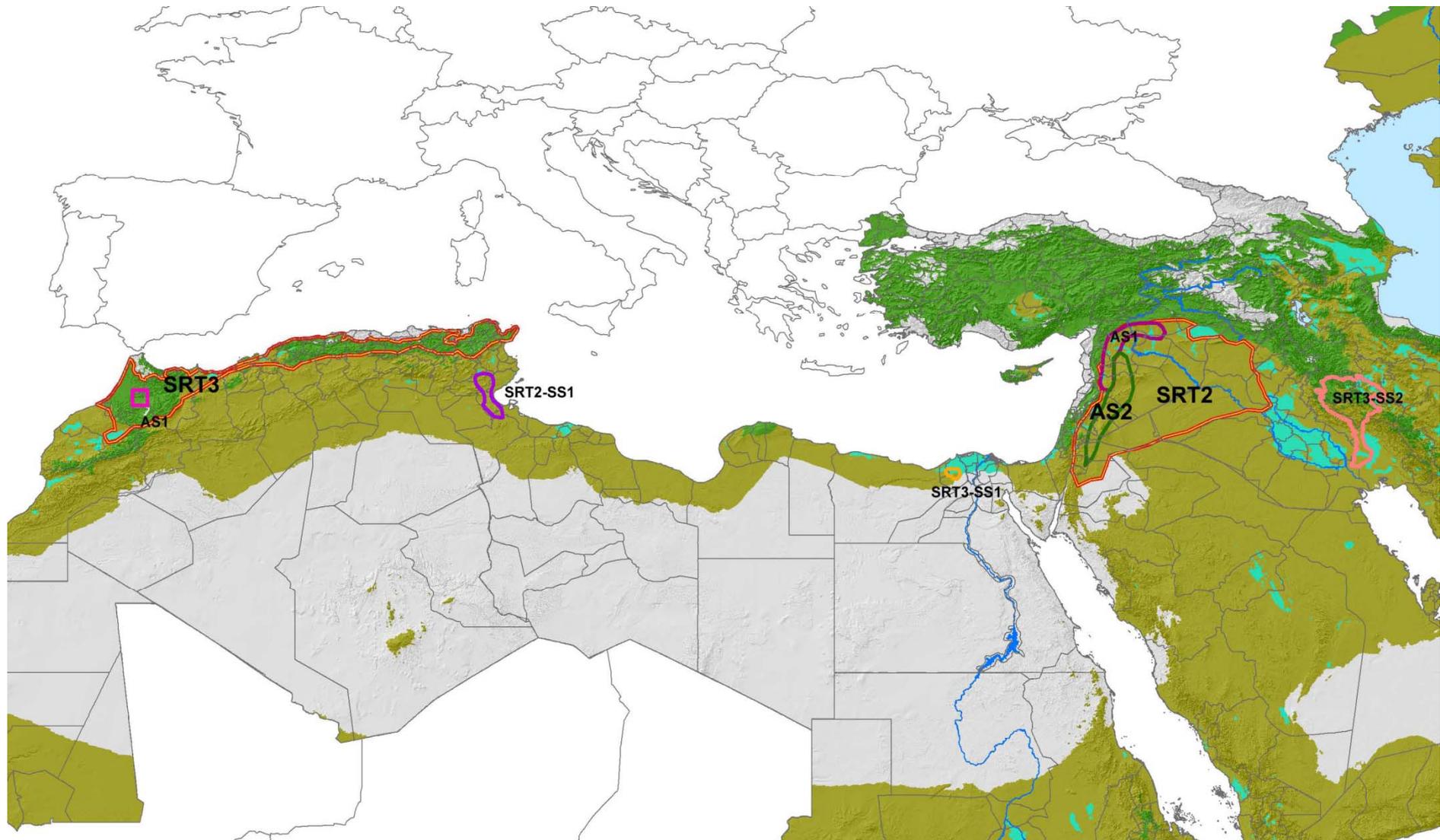
1. CMN: Cinzana-Markala-Niono
2. GYO: Goursi-Yako-Ouahigouya
3. FAK: Fakara
4. BDF: Bandafassi
5. DTK: Damango-Tolon-Kumbungu
6. BTM: Bawku-Tone-Materi
7. DAH: Dahra



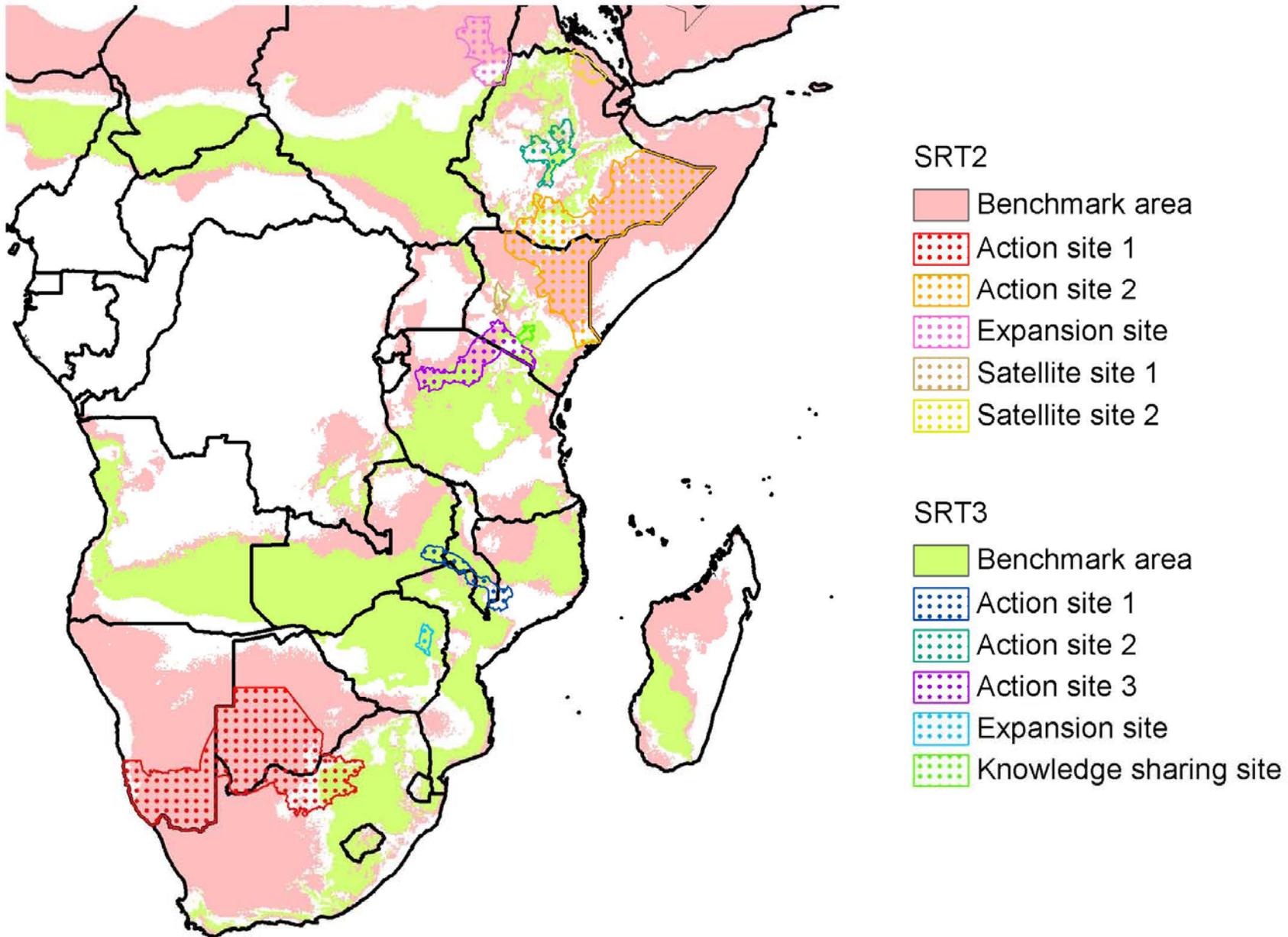
- SRT2 - [ 0.03,0.35 [ Aridity Index
- SRT3 - [ 0.35,0.65 [
- Surface waters



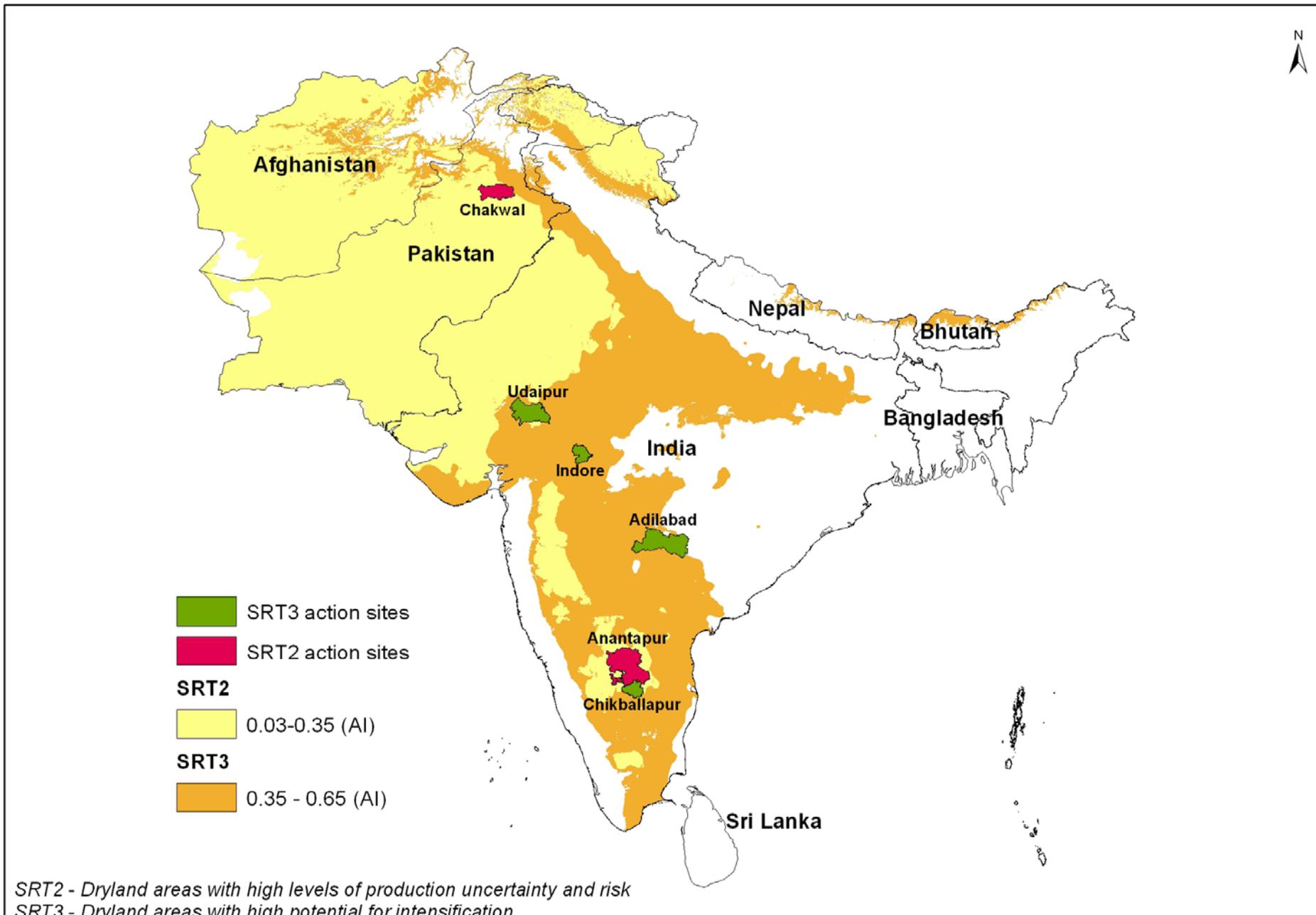
## Target Areas and Action Sites: North Africa & West Asia



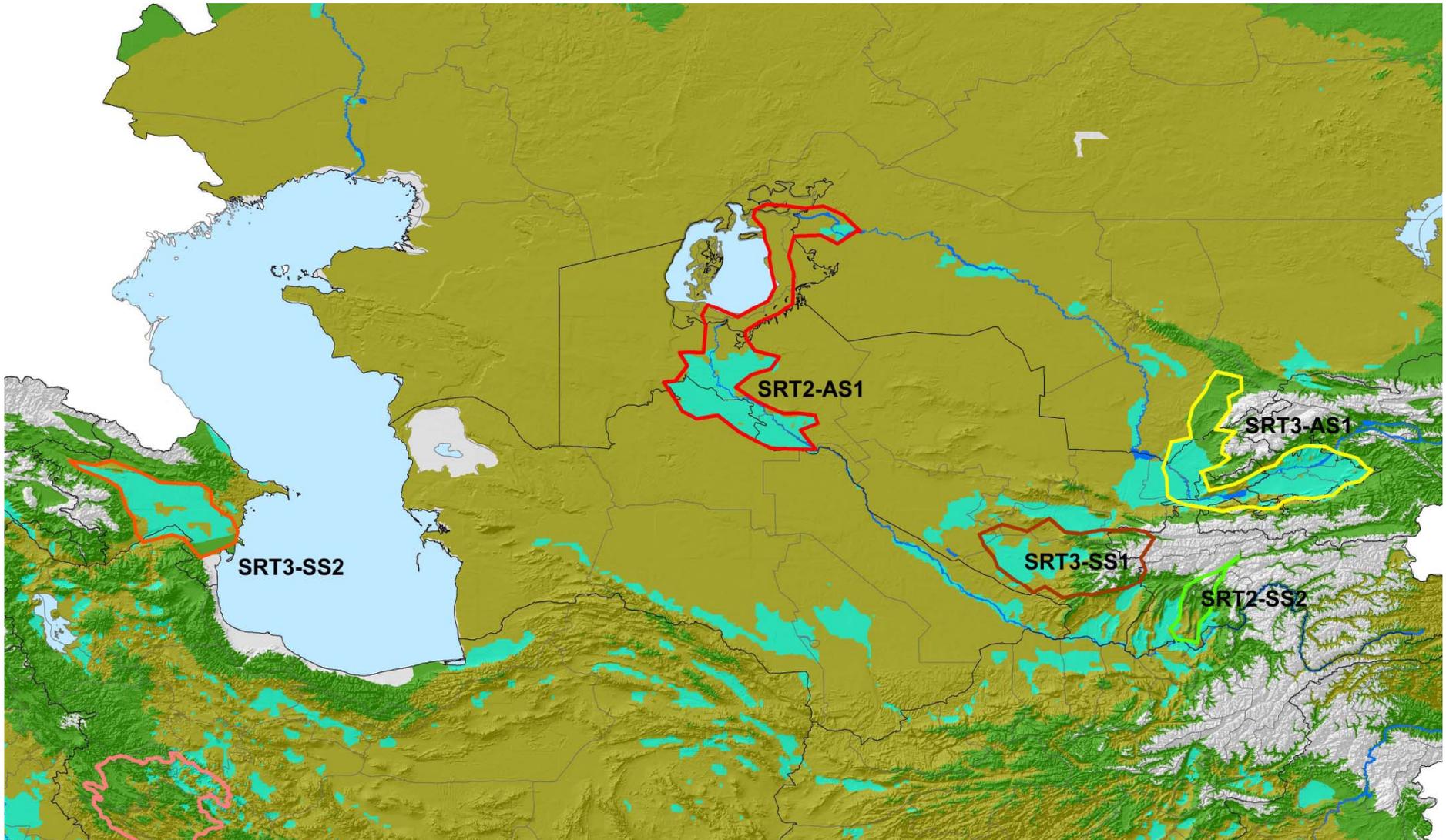
## Target Areas and Action Sites: Eastern & Southern Africa



# Target Areas and Action Sites: South Asia



## Target Areas and Action Sites: Central Asia & Caucasus



## CRP1.1 full proposal development calendar (May 2010 – June 2011)

Date	Activity	Location
10 May	Submission of Concept Note to Consortium Board	Virtual
23 June	Receipt of Consortium Board's comments on Concept Note	Virtual
6–7 July	Planning Workshop with CGIAR Centers	Nairobi
8–9 July	Stakeholders' Workshop with CGIAR Centers and main NARS partners	Nairobi
11–25 July	Drafting full proposal by respective SRT writing coordinators, and output writing focal points; update other sections in full proposal –incorporating comments from Consortium Board, external reviewers, and inputs from Nairobi meetings	Aleppo, Virtual
26–31 July	Collating, finalizing writing and editing 1st draft full proposal	Virtual
2 Aug	1st draft sent by ICARDA for perusal by all (CGIAR and non-CGIAR) partners and key stakeholders	Virtual
8 Aug	CGIAR pre Stakeholders' Consultative Conference meeting	Aleppo
9–10 Aug	Stakeholders' Consultative Conference	Aleppo
11–14 Aug	Finalize drafting full proposal development incorporating inputs from Stakeholders' Consultative Conference by writing team	Aleppo
15 Aug	Posting at Lead Center's web site of 2nd draft for e-consultation with broad range of partners and stakeholders	Aleppo
16–23 Aug	E-consultation with stakeholders	Virtual
24 Aug	Summarize e-consultation inputs	Virtual
25–28 Aug	Update full proposal with e-consultation inputs	Virtual
29–31 Aug	Artwork and last edits to full proposal (3rd draft)	Aleppo/Virtual
1 Sep	Lead Center on behalf of all partners, submits CRP1.1 proposal (final draft) to Consortium Board through interim Consortium Office	Aleppo
11-14 Feb	Core writing team meeting and e-follow up to address Consortium Board guidelines	Dubai/Virtual
11-13 May	Core writing team meeting and e-follow up to address CGIAR Fund "Must Haves"	Dubai/Virtual
27-30 June	Dryland Systems Regional Design Working Meeting to further characterize and select Benchmark Areas, Action and Satellite Sites, elaborate on hypothesis testing, identify initial partners and priority undertakings in each of the five Target Regions, and fine-tune Knowledge Sharing Centers	Nairobi

## Steps and Timeframe: The phasing of the process

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1. February – April 2012: three months of groundwork by all involved, in direct contact with NARS and other representatives in the Target Regions.
2. **May – June 2012: RIWs within each of the five Target Regions. Workshops with ICARDA, consultants, member CGIAR Centers, NARS, advanced research centers, GFAR Regional Fora, development agencies, farmers and water users associations, NGOs, processing representatives, market and policy specialists, policy-makers, private enterprise, and other partners and stakeholders.**
3. July-August 2012: synthesis of five RIWs' outcomes and develop draft **Inception Phase Report**
4. September 2012: Synthesis Workshop to endorse the draft **Inception Phase Report** with CG partners, consultants, NARS and selected stakeholders,.
5. **September 2012: finalization of synthesis, and submission of CRP1.1 Inception Phase Report to CGIAR Fund Council.**

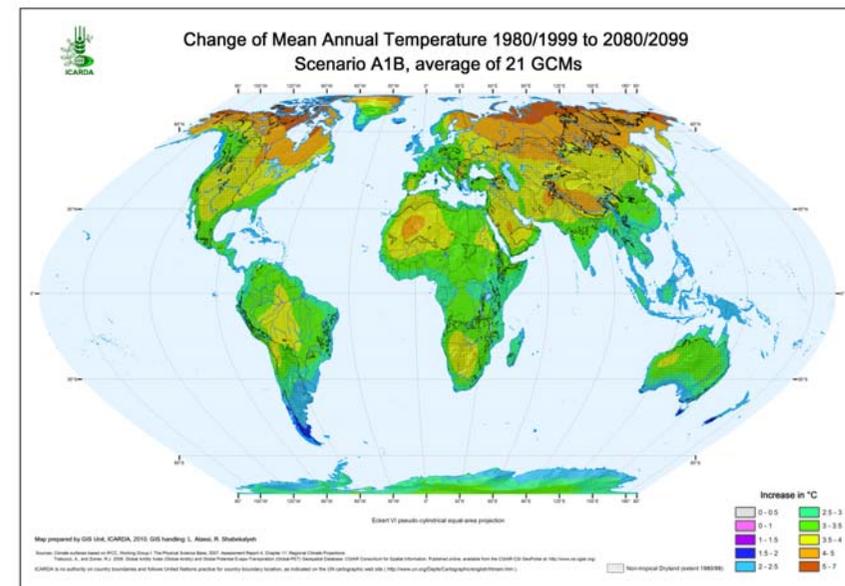
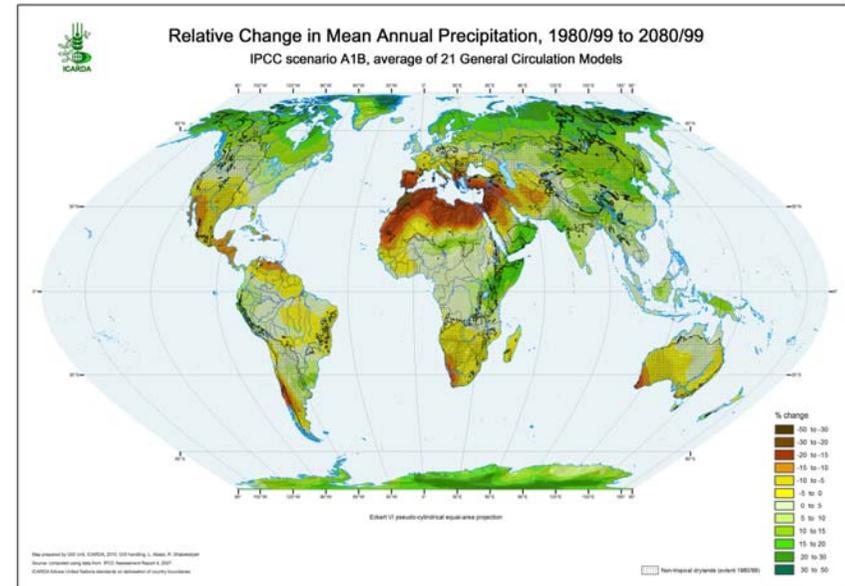
# Next Steps

## Ground-work & in each of five Target Regions

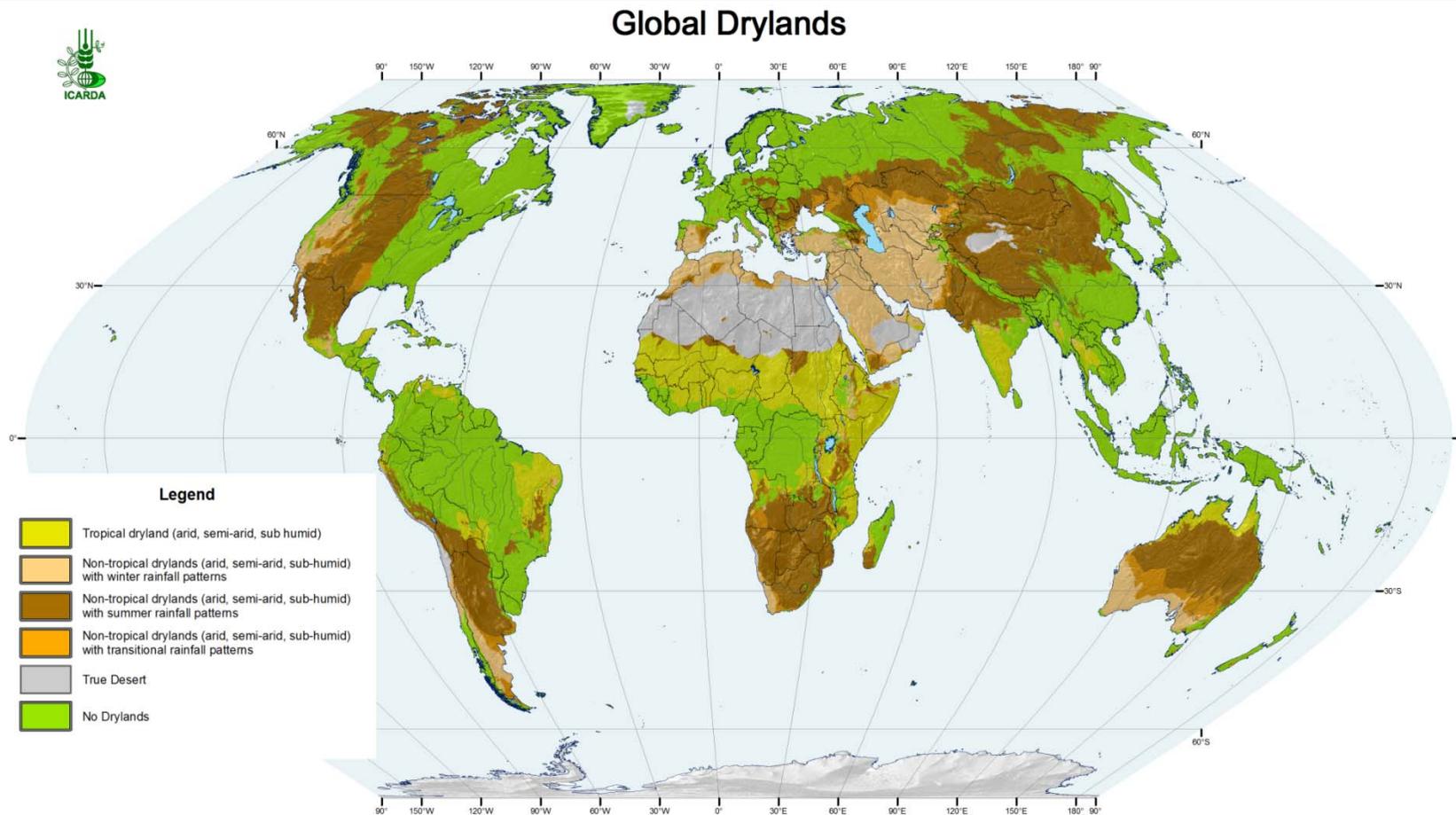
1. Site characterization
2. Research hypotheses and major research questions
3. Activities and outputs
4. Measurable indicators
5. Monitoring & Evaluation
6. Partners
7. Impact pathway
8. Logframe

## Inception Workshops in each of five Target Regions of senior partners

1. Validation
2. Consensus
3. Buy-in
4. Sign-off



# CRP1.1: Integrated and Sustainable Agricultural Production Systems for Improved Food Security and Livelihoods in Dry Areas (Dryland Systems)



Map prepared by GIS Unit, ICARDA, 2010. Author: E. De Pauw. GIS handling: L. Atassi, I. Yuldasheva

Sources: Trabucco et al, Hijmans, R.J., S.E. Cameron, J.L. Parra, P.G. Jones and A. Jarvis, 2005. Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology 25: 1965-1978. (<http://www.worldclim.org/current/>)

Eckert VI pseudo-cylindrical equal-area projection