



Situation and Response Analysis Framework (SRAF)

Flood and Drought Jamshoro, Umerkot and Tharparkar

July, 2017

Situation and Response Analysis Framework

Jamshoro, Umerkot and Tharparkar

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1 Executive summary

1.1 Process overview and purpose

The Situation and Response Analysis Framework (SRAF) workshop was conceived as the last stage in a series of analytical studies of the three districts, with a focus on drought and flood emergencies. Several analyses of emergency needs have been undertaken, including a detailed needs assessment during the 201-16 drought in Sindh (the Sindh Drought Needs Assessment, SDNA) and a more recent Joint Observation Mission. In addition to these, several other studies have documented the baseline situation of people, and aspects of the market context in some detail, namely the Household Economy Analysis (HEA) of 2015, and the two Pre-Crisis Market Assessments (PCMA) which looked at the market systems associated with wheat flour – a critical staple – and goats, an important livestock animal for both farmers and pastoralists.

Taken together, these processes and their reports provide a fairly thorough description of:

- the baseline situation of people living in parts of the three districts;
- disaggregation within this by livelihood strategies and by wealth groups;
- the baseline situation of some critical market systems;
- the direct impact of drought and flood shocks, across a range of sectors;
- the indirect impact of past shocks on market systems and prices;
- the coping strategies that different households adopt to address these;
- the impact and effectiveness of those coping strategies.

This is a substantial package of data, and it actually provides us with some degree of predictive power – we have the tools through HEA, for example, to infer what might happen to household access to food and income if crop yields are reduced, or if a proportion of livestock get sick or die, milk yields drop, or crop prices fluctuate. In parallel, the PCMA provide us with an understanding of how market systems react to floods and drought, and open our eyes to alternative kinds of responses. These are complemented by huge experience of past events within the affected communities, amongst the technical specialists in extension and other services, and within humanitarian agencies working with the authorities in response.

What we do not have is a formal plan that enables this abundant analysis to translate into an effective contingency plan. The SRAF process will not do this – it is not, in fact, the final step in the process – but it does provide many of the components of the plan and the means to choose between them.



Figure 1: the components of the wider process in a timeline

1.2 SRAF workshop

The SRAF process is fairly standardised: and aims to provide a transparent and objective means of comparison between different response options to deal with a specific problem. That is, it could be used to compare an unconditional cash grant with a cash for work programme with a food distribution – all seeking to improve access to food at a critical time. Alternatively, it could be used to compare a scheme to build flood barriers with one to plant trees along river banks; or to compare a range of options to prevent or mitigate the loss of livestock through drought. However, the expectation was that SRAF could be used to consider a wide range of interconnected problems that make up two broad scenarios: drought and flood.

Therefore, a modified SRAF process was designed which aimed to take forward the analysis and provide a reasonable basis for more detailed preparedness, contingency and response planning in the future.

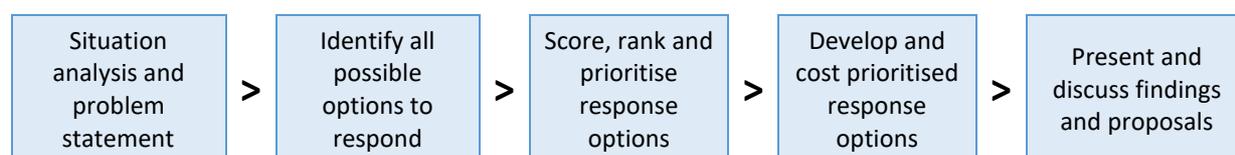


Figure 2: the elements of the SRAF workshop process

In the early stages of the SRAF, it's important to keep the door open to new, innovative, interesting and alternative ideas. Nothing is out of bounds, and no ideas are thrown out. In a later step, a rigorous scoring system is used to grade all the response options and compare them.

1.2.1 Situation analysis

The districts under review: Jamshoro, Umerkot and Tharparkar are highly exposed to hazards. For many, livelihoods are precarious, and resilience is low. While the situation was not critical at the time of the analysis, for the poorer households, chronic intergenerational poverty combines with high exposure to hazards and future disasters are inevitable.

Key findings from the document review and the contributions of participants are as follows:

In different parts of the districts, drought and flood cause repeated shocks, and there is sometimes insufficient time between shocks for households to recover.

In drought years (and these include 2013-14, 2014-15) the impacts are multiple, and typically include:

- Reduced crop production, especially in rain-fed areas
- Increased prices for foodstuffs
- Reduced prices for livestock
- Reduction in herd size and viability
- Increased labour migration
- Reduced income per migrant labourer

Flood impacts typically include the following for affected areas:

- Increased prices for crops grown in the irrigated zone
- Reduced labour rates
- Increased collection and sale of firewood

The situation of the very poor – often without assets such as land or livestock – is fundamentally different from others. Their exposure to shocks is different (often but not always worse) and their coping strategies are different. Their levels of debt (often intergenerational, inherited debt) are such that they are effectively trapped in economic and livelihood arrangements that offer no realistic chance of escape.

All of the reports emphasise the importance of a detailed understanding of seasonality, both in terms of understanding the baseline and monitoring data, and in planning responses.

Many of the existing responses undertaken are 'standards', and are focused on the direct or proximate causes of the problem. There is limited innovation in the system, and root causes are not addressed.

1.2.2 Being clear about the scope of the problems

A wide-ranging problem tree analysis was undertaken on both flood and drought situations to try to unpick the different levels of issues. First, problems were considered at four levels:

- The immediate aspects of the problem – being displaced and having nowhere to live, being hungry or malnourished, health problems – are the surface expression of an underlying chain or net of causes. These can be described as outcomes.
- The immediate cause of these outcomes – the proximate cause – includes issues like homes being flooded, animals sickening or dying because of insufficient water or fodder, poor sanitation
- Below this there are underlying causes, including issues like poor market access, weak warning systems, low levels of educational attainment.
- Right at the bottom, and hardest to tackle, are foundational root causes. For example, household level resilience for many is undermined by the exploitative power relationships between landowners and labourers, between people of different castes, and between those of different religions.

During the exercise, it became apparent that there were negative feedback loops or cycles within the problem analysis, where certain aspects of the problem reinforced other aspects. The expected simple chains turned out to be quite complex webs.

The problems are also dynamic. In addition to the feedback loops described above, many distress coping strategies undermine longer term resilience. The climate is of course changing and weather patterns are becoming more variable. Market systems, communications and infrastructure are developing over time.

1.2.3 Creating a frame for analysis

Before participants could begin to generate a more holistic package of potential response options for detailed consideration, they needed a framework in which to compare them. The choice of framework is critical to the utility of the product. It must be simple and easy to apply – yet actually separate the various options into useful and mutually exclusive categories. After some consideration, the following framework was adopted:

			Timing	Before	During	After
			Purpose	Disaster preparedness, resilience and capacity building Contingency planning Early warning early action	Emergency response	Early recovery Rehabilitation and reconstruction Development
Hazard	Livelihoods	Target				
Flood	Typically, areas with irrigated agriculture	Households with no land and few assets				
		Other poor people				
		Other				
Drought	Typically, areas with agro-pastoralist livelihoods but may include irrigated areas	Households with no land and few assets				
		Other poor people				
		Other				

Figure 3: the analytical framework used to categorise response options

For the presentation of the ROs within this report, this framework has been simplified further, and the various target groups considered together.

1.2.4 Generating a range of potential solutions: the response options

The majority of current response options address either the needs (the outcomes of the problem tree) or the immediate, proximate cause. However, unless the underlying issues are addressed, resilience is unlikely to develop, and the level of exposure to the hazards remains high.

Participants working in groups were encouraged to consider the problem using a variety of lenses to develop the widest range of response options. After a full day of work almost 100 response options were described in principle using a simplified project description format, reduced to 84 once overlaps and duplicates had been combined. In some cases, projects with very similar titles used different approaches to achieve similar aims: in such cases both projects were retained. This is the essence of a response option process – identifying the best approach to achieve a specific goal.

Before a drought

Water tank for rain catchment
 Capacity building of relevant stakeholders
 Influence government to form a district level drought management plan
 Vaccination for livestock
 Awareness of preservation of food fodder and water
 Capacity building of district level department of drought emergency preparedness
 Deworming and vaccination of livestock
 Cash for Insurance
 Advocate with government to minimise tax on humanitarian responses
 Increase HH storage capacity through rainwater harvesting for drinking water purposes
 Advocate for government to formulate desert policy
 Increase communal water storage capacity through rainwater harvesting infrastructure
 Advocate with government for flood management plan
 Advocate with government for creation of drought security plan
 Destocking of livestock
 Capacity building of vendors for electronic cash transfer
 Establishment of markets for natural substances

During drought

Livestock emergency assistance to drought affected communities
 Provision of health assistance - medical camps
 Transport voucher programme for health access
 Blanket distribution of nutrition supplements to affected population
 Nutrition and health response
 Cash for training to enhance the capacity of drought affected communities
 Awareness on crop diversity
 Education system - attendance incentives
 Training hygiene awareness
 Social Safety Net
 Access to drinking water
 Transportation voucher for livestock
 Food aid and cash support
 Livestock vaccination
 Livestock camp establishment
 Inclusion of gender, age and disability

Recovering from drought

Restocking
 Bio-saline agriculture
 Drought advocacy with key stakeholders
 Early Warning System (mobile network)
 Facilitate market accessibility small livestock owners
 Rainwater harvesting - HH level
 Provision of drought tolerant hybrid seeds
 CMAM programme for malnourished population
 Drip Irrigation system
 Solar water pumps
 Promoting alternate livelihood
 Value chain management of local products in drought affected areas
 Conditional cash transfer programme for drought affected
 Fodder storage warehouse market project
 Alternative income programme

Before a flood

Reforestation
 Integrated agriculture flood preparedness
 Raised beds for livestock assets
 Capacity building of district level government on flood emergency response
 Advocacy with government for food security plan
 Community based disaster risk management
 Building community resilience on livestock
 Integrated flood preparedness
 Value chain management and strengthening market system
 Advocate with government to minimise and lessen (the need for) humanitarian response
 Cash for insurance
 Capacity building for vendors on CTP electronic cash transfer

During flooding

Food assistance
 GFD
 Emergency camping in flood
 Evacuation of community from flood to safe areas
 Blanket distribution of nutritional supplement
 Distribution of NFI kits
 Establishment of temporary learning centres
 Emergency WASH programme
 Establishment of health facilities
 Cash assistance to flood affected
 WASH
 WASH
 Emergency fodder in camps

Recovering from flooding

Fodder provision for herd rehabilitation
 Rehabilitation of farm to market roads through CFW
 Capacity building of PDMA's
 Conditional cash transfer programme
 Crop variety replacement
 Policy level advocacy with key stakeholders
 Integrated livelihood and nutrition intervention
 Agriculture input to flood affected communities
 Integrated flood preparedness
 Restocking assistance through voucher programme
 Rehabilitation of water holes, water courses and land

Table 1: 84 response options were generated during the third day of the workshop

1.2.5 Comparing the response options using an objective framework

It's important to be clear the basis on which response options will be compared. In the Sindh SRAF workshop, this process took three separate steps.

In the first step, the main factors were debated and agreed. These factors provide the main criteria against which each response option would be measured.

In the second step, a scoring system was determined within each criterion, providing a fairly objective measure on a five-point scale from -2 (very poor) to +2 (very good)

The third and final stage was to apply the scoring system to the 84 response options. Five groups each scored 84 projects against six criteria – a total of 2460 data points.

The data was transcribed into a prepared spreadsheet ahead of the selection of response options and the development of detailed project descriptions.

For presentation on the final day, and as a trigger for discussions, six projects were selected. They were not necessarily the highest scoring (and this in part reflects the unusually wide-ranging nature of this SRAF exercise) but they were in some ways the most innovative or otherwise interesting.

The six selected proposals were:

- Livestock camps during drought
- Destocking, on the basis of a drought warning
- Diversification of livelihoods for the poor and very poor
- Introduction of drought and flood resistant crops
- Weather / losses insurance for increased resilience
- Strengthening climate and early warning systems

1.3 Innovation recommendations from the workshop

It's important to note that while these six projects were identified for further detailed work, that does not imply that these are the only projects worthy of further analysis, not that existing efforts are wrong or misguided. Time only allowed a small number of projects to be described, and there was little point in describing anew, projects that are already proven.

1.3.1 Livestock camps during drought

This proposal describes bringing livestock together to a safe space during drought, in order to more easily provide fodder, water and veterinary assistance, in order to minimise losses. The project acknowledges that there may be challenges of acceptance within the community, and risks losses through theft or disease, and proposes some strategies to mitigate these.

Such camps could be organised at the community level or at a higher level, depending on the situation.

1.3.2 Destocking, on the basis of a drought warning

This proposal describes the possibility of encouraging or incentivising destocking before the drought strikes, on the basis of a fairly firm prediction of a poor season. Once drought hits, animal health suffers and prices drop: early selling of healthy livestock provides a cash buffer for the drought season, and reduces the overall herd size, reducing the demand on limited resources. Once the drought has passed, new animals can be purchased using the cash.

This is a challenging project to implement, although there are models available from the Horn of Africa. It requires substantial preparation with the meteorological services (the warning must come sufficiently early), the traders and market actors, the communities, and of course potential donors. It may be necessary to provide incentives or loan capital to traders and middlemen to ensure they have capacity to take up additional sales.

This is an excellent example of an 'early warning early action' project, described in a little more depth in the main report.

1.3.3 Diversification of livelihoods for the poor and very poor

This proposal seeks to help the poor and very poor out of their current poverty trap by providing them with additional, diversified sources of income. The project identifies some potential options, and other would be found through the studies proposed.

It's worth noting that powerful landowners typically oppose projects of this sort, often justifying their opposition with the twin arguments that they know what's good for their tenants, and that as responsible landowners, they have a duty of care. In fact, if very poor people were able to access secure alternate income they probably would, and the supply of labour would be threatened – and with it, the whole system would face a 'readjustment'.

However, given the low education levels of the very poor, their remoteness from markets and the challenging environment, access to additional income is likely to be fairly low, and the threat to the status quo likewise. Projects such as this are worthy of a solid pilot and action research, with both social and financial evaluation built in.

1.3.4 Introduction of drought and flood resistant crops

This proposal is much more traditional in approach, looking at the identification and introduction of alternative crops or varieties better suited to cope with harsh conditions. Such projects are obviously attractive but the challenges are well documented: changing people's preferences is difficult, and new varieties sometimes require additional inputs in terms of specialist fertiliser or pesticide, or the seeds cannot be replanted, or there are issues associated with marketing. Efforts must be made to pilot new varieties with great care and not expose poor and vulnerably sharecroppers to additional expense.

1.3.5 Weather / losses insurance for increased resilience

Insurance is an area of growing interest, and a number of models have been trialled globally to provide insurance to poor farmers and pastoralists.

The proposal included both the insurance component, and a cash for work element to provide the means for farmers to purchase the insurance.

A typical challenge of insurance schemes is identifying an objective threshold against which a payout is made. Governments are sometimes reluctant to declare a state of emergency, and in any case, there are a wide number of factors that inform such decisions. In some cases, satellite imagery is used to provide an independent measure of likely crop yields or availability of water or fodder.

1.3.6 Strengthening climate and early warning systems

This proposal seeks to develop an integrated early warning system for drought and flood in the affected area, using upstream indicators and medium term meteorological forecasts. The absence of such a system presents a substantial gap in existing preparedness efforts.

The key stakeholders to the process would be communities, both as experts in their own environment and as end users of the warnings provided; local governments in coordination, design and maintenance roles, NGOs working with communities and supporting planning for disasters as well as working on advocacy with government; the private sector in diverse roles associated with communications and response; and the academic community providing much of the technical input.

This is an ambitious project which should be grounded in government policy in order to succeed, but which is clearly very necessary and would add considerable value to the whole system.

1.4 Systemic focus areas

1.4.1 Government-led components

Policy framework. The current policy and planning framework was reported to be incomplete. This is a critical precursor to any effective intervention. Gaps identified included specific policy for desert areas, and for disaster management associated with floods and drought. Policy should be multi-sectoral and reach beyond

Early warning system. The current early warning system appears to be under-developed and official declarations of drought emergency are reactive, not predictive. Government should create the environment in which effective early warning can operate, and implement those parts for which it is responsible.

Structural inequality. The traditional social structures are a key factor in maintaining structural inequality. Dismantling these (and replacing them with something more appropriate) is a long-term developmental need. The problem needs to be acknowledged and addressed: other interventions will not achieve their potential in the absence of this element.

Inter-sectoral coordination. It's clear that the food security sector coordinates itself fairly well, and that multi-sector initiative have produced impressive results in the past (for example, the SDNA). But overall the coordination framework appears under-utilised.

1.5 Process recommendations

Mapping of activities with the food security sector. Using this report to provide a framework, a mapping exercise of planned and existing activities could provide the basis for a period of action research leading to the development of realistic and comprehensive contingency plans.

Pilot projects: where new ideas have been proposed, these should be usually undertaken as trials or pilots, with an associated transparent, objective (and in some cases external) process of review and learning. There's a clear role here for the working group to coordinate and to some degree perhaps direct this process: in any case to maintain an overview.

Existing projects with low scores: A number of traditional activities scored poorly, especially from the response phase. It may be that there are simply no good options, or in some cases there may be innovative alternatives. Existing projects which received low scores should be reviewed, however, using external reviewers and objective criteria. Results should be shared within the working group.

Sharing of reviews, evaluations and learning. As the process moves forwards towards a common set of contingency plans, it's vital that reviews and learning are shared.

Investment in coordination. It would be a false economy to cut back on the work of the food security working group at this time. The SRAF is another step in the process, but the work is incomplete and the sector needs leadership to put in place the culture and practice of proper evidence-based contingency planning.

Formal contingency plans. Multi-sectoral plans, specific to areas, that build on existing capacities and coping mechanisms and which allocate clear roles and responsibilities to all stakeholders.

Early warning early action. As part of that contingency planning process, the idea of early action should be explored. This means using credible forecasts and agreed objective indicators to trigger a change in activities: a rapid, short term investment in strategies that reduce exposure to risk in the few months before drought impacts start to be felt. This requires impressive levels of coordination – pre-financing agreements, for example, 'crisis modifiers' that allow adjustments to agreed development budgets. But the dividends are worth the effort.

2 SRAF workshop report

This section of the report describes the process and interim outputs of the Situation and Response Analysis Framework (SRAF) workshop. The role of the consultant in this phase was that of facilitator, leading the process and managing the data, but not contributing programme option ideas or directing the outputs.

The SRAF workshop was conceived as the last stage in a series of analytical studies of the three districts, with a focus on drought and flood emergencies. Several analyses of emergency needs have been undertaken, including a detailed needs assessment during the 201-16 drought in Sindh (the Sindh Drought Needs Assessment, SDNA) and a more recent Joint Observation Mission. In addition to these, several other studies have documented the baseline situation of people, and aspects of the market context in some detail, namely the Household Economy Analysis (HEA) of 2015, and the two Pre-Crisis Market Assessments (PCMA) which looked at the market systems associated with wheat flour – a critical staple – and goats, an important livestock animal for both farmers and pastoralists.

Taken together, these processes and their reports provide a fairly thorough description of:

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What we do not have is a formal plan that enables this abundant analysis to translate into an effective contingency plan. The SRAF process will not do this – it is not, in fact, the final step in the process – but it does provide many of the components of the plan and the means to choose between them.

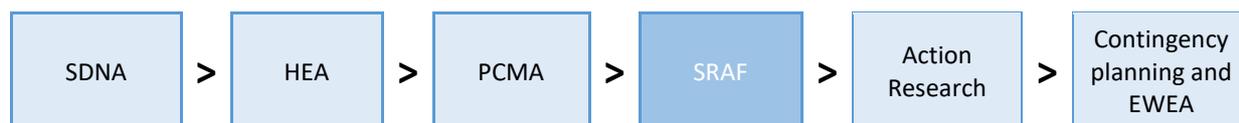


Figure 4: the components of the wider process in a timeline

2.1 Programme

The agenda as originally planned is presented below in Figure 5. In the event, the presentations on Monday 15th began late due to the late arrival of some guests.

	Thurs 11 th May	Fri 12 th	Sat 13 th	Sun 14 th	Mon 15 th May
	<i>Situation analysis and problem statement</i>	<i>Identify all possible options to respond</i>	<i>Score, rank and prioritise response options</i>	<i>Develop and cost prioritised response options</i>	<i>Present and discuss findings and proposals</i>
0900	Registration Purpose, overview of process Expectations and ground rules	Presentation of RO format Group work 1: Zones. Livelihood zones and hazards	Presentation of RO list Selection of criteria for ranking	Format for proposals and presentations Group work begins	Presentation of SRAF framework and overview of recommended response options
1030	Refreshment break				
1100	Summarised findings of the HEA and the needs assessment What does success look like?	Group work 2: Timing: seasonality; preparedness, response, recovery and development	Determination of scoring framework for each selected criterion	Group work continues	Presentation of response option detailed proposals; Q&A Higher level recommendations
1230	Lunch				
1330	Understanding root causes: the problem tree (group work) Presentations of findings (plenary)	Group work 3: Sectors and integration Group work 4: Market perspectives of responses	Application of scoring to RO – population of matrix	Draft presentation and feedback session	Individual follow up as required
1500	Refreshment break				
1530	Agreeing a multi-sectoral analytical framework	Finalising the list of response options Reviewing the problem statement – higher level constraints	Combination of results Selection of final list Identification of working groups for Sunday	Finalisation of recommended RO proposals	

Figure 5: SRAF workshop programme

2.2 Participation

The following organisations were represented in the main workshop

- ACF International
- Agriculture Extension
- BEST - Pak
- Bureau of Statistics, Sindh
- Concern World Wide
- FAO
- Food Department
- Livestock Department
- Planning & Development Department, Sindh
- TRDP
- UNICEF
- WFP
- WHH

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In addition to the above organisations, the following guests attended the final day presentations and contributed to the discussion.

Ali Ahmed Channa	Director	Bureau of Statistics, Sindh
Dr. Muzafar Vighio	Deputy Director	Livestock Department Karachi
Shah Nasir Khan	Program Policy Officer	WFP
Dr. Sono Khangharani	CEO	TRDP Micro Finance Foundation (TMF)
Dr. Umar Khan	Nutrition Specialist	UNICEF
Dr. Mazhar Iqbal	Programme Policy Officer (SUN) P&D	P&D Department Sindh
Angeliki Dimou	FSWG Coordinator	FAO
Zaheer Udin Babar	Manager	TRDP
M. Akram Bhathi	Deputy Director	Bureau of Statistics, Sindh
Muhammad Ali Shaikh	Director Operations	PDMA Sindh
Dr. Nargiza Khodjaeva	Head of Office	UNICEF

2.3 Methodology and limitations

In its 'traditional' form, an SRAF process takes a single issue, uncovers the root causes of that issue, and then identifies, scores and ranks potential responses to that issue. Since the start point for this process was not a single issue, but a whole host of challenges grouped under two broad headings (flood and drought) the balance of activities was slightly different. In particular, the scoring aspect is less rigorous than in a traditional approach for two reasons:

- The wide-ranging problem statements led to a huge collection of potential response options – almost a hundred. Each of these was written up in a one-page format, but the level of detail possible was not sufficient for a rigorous scoring process.
- The range of problems meant that different response options were dealing with different aspects of a problem, and while the scoring remains interesting it's not always appropriate to use it for direct comparison of options. To say that another way: some of the response options were complementary rather than alternatives. Despite splitting the problem into six parts (see section 2.5), we were in some cases comparing apples with oranges.

Time did not allow for a comprehensive mapping of existing and planned activities by state and non-state actors, nor for an exploration of current policy, nor an assessment of the capacity of current service providers: all of which are key aspects of the context. No documentation has been seen that would provide such an overview. This shortfall is mitigated in large part by the personal experience of the participants, including a number from government technical departments, who will have brought this understanding implicitly to the table.

2.4 Situation analysis

The intention of this stage of the workshop was to ensure that all participants began the process with a common and complete understanding of the situation. Since almost all participants are engaged on a daily basis with the challenges of these districts, this session was largely an update, although not all participants will have been familiar with all the technical aspects of each report. Presentations were made on the findings of the HEA and the market assessments, and discussions took place on the recent observation mission and the informal projections for the 2017 monsoon season.

It is not the intention in this report to repeat the findings of the various needs assessments and other analysis: much of it relates to events that have already past, and it is well covered elsewhere. However, there is value in contrasting the documentation which is available, drawing some general conclusions about future shocks, and highlighting some of the things that the reports do not address, which go some way to explaining their findings.

2.4.1 Review of documentation

Table 2 lists and contrasts the reports and information sources used during this phase of the workshop.

Evidence	Strengths	Limitations	Comments
HEA report 2015	HEA offers a predictive capacity to understand the impact of shocks, market changes and coping in a scenario. HEA provides a solid baseline of information for a reference year and allows disaggregated understanding of likely impact across wealth groups and livelihoods.	Covers only 4 livelihood zones of a possible 17 across the three districts. Using the HEA findings to model future events is a technical and challenging process.	The baseline is now several years old, but it remains valid as livelihood strategies change and evolve fairly slowly
SDNA report August 2016	Substantial household level data collection process across four agro-climatic zones identified as being highly drought-affected. The report analyses water scarcity and the impact on livelihoods, and considers food-based coping strategies and nutritional aspects of the situation. It also uses its substantial dataset to cross-reference different indicators linking drought, ownership of assets, health and WASH. The SDNA report provides detailed recommendations for short, medium and long term for various sectors in drought affected districts.	Accurate information on income and expenditure is extremely hard to collect and the data collected in the report should be treated with caution. Although data was collected on household debt and borrowing, this was not explored in depth. Although some disaggregated data was collected, there is limited analysis of gender and power dynamics. Other issues relating to power relationships are almost entirely absent from the narrative.	Provides a snapshot in time of the situation of drought affected communities in Sindh in October and November 2015, and the findings and draft report were circulated in December and January. although the report was finally published in August 2016.
PCMA reports on goat and wheat flour markets January 2017	PCMA provides a baseline analysis of critical market systems, including an analysis of likely points of stress during a shock. The PCMA reports identify some of the challenges associated with chronic poverty but do not go into detail.	The recommendations related to food assistance are at odds with the text, and the conflation of 'cash and vouchers' in the recommendations is surprising in an analysis of market systems.	The PCMA reports provide a number of market-based response options (and indeed others such as flour fortification and incentives for education) which broaden the base of options available.

SRAF Jamshoro, Umerkot and Tharparkar

Evidence	Strengths	Limitations	Comments
Joint observation mission report <i>Match 2017</i>	This inter-agency snapshot is useful in a predictive but informal sense about the likely challenges of the coming season.	The lack of formal predictive analysis means that the report is less useful in terms of specific preparedness or Early Action activities.	It would be useful to have a formalised pre-hazard meeting of key stakeholders, based on field data, with the mandate to make a formal statement about the coming season.
Participant experience	Participant experiences overwhelmingly supported the analysis of the various reports, and added additional aspects for consideration which the reports generally tend to avoid.		Participants were initially reluctant to discuss some of the more challenging aspects of the context, relating to cultural, religious, and caste dynamics. However, gender dynamics and the relationship between landowner and landless (which overlaps with the above) were easier to discuss.
Forecasts	No formal forecast has been issued for the 2017 monsoon season, although most projections suggest a normal or slightly below normal rainfall.	Participants suggested that the formal projections come too late to be useful in a predictive manner.	Formal projections are very helpful as they provide a structured basis and justification for early warning early action programme activities.

Table 2: information sources available to the situation analysis

2.4.2 Key findings: wealth groups don't form a simple continuum

During the HEA process, communities within each livelihood zone identified four wealth groups, described as very poor, poor, middle and better off. The HEA considers livelihoods, income sources, assets, and coping strategies for each wealth group in its analysis.

The following data is from the Nagar Parkar rainfed crops and livestock LZ:

wealth group	very poor (23%)	poor (34%)	middle (28%)	better off (15%)
HH size	8	8	8	8
Land owned	0-7 acres	2-10 acres	7-20 acres	10-35 acres
Land cultivated	0-8 acres	4-11 acres	8-22 acres	10-35 acres
Livestock and assets	1-5 goats	2-7 goats 0-2 cattle	4-10 goats 1-5 cattle 0-2 oxen	6-18 goats 2-8 cattle 2 oxen
Annual cash income (PKR) / hh per year	91,275	105,395	172,735	398,925
Total food and cash income (USD) / person per day	0.38	0.45	0.71	1.50

Table 3: sample wealth breakdown: Nagar Parkar rainfed crops and livestock livelihood zone

On first inspection, these four groups sit on a simple continuum from very poor to wealthy. But closer review shows this analysis to be simplistic. At each end of the scale the group is distinct from the majority. For example, the better off have no need to cultivate land they do not own, and this places them in a different economic position from the others, but also a different position in terms of power and relationships.

For the very poor group, the critical aspect is also asset-based. The very poor own very few livestock and little land (and in Jamshoro irrigated wheat LZ, they actually own zero). Again, this places them in a different economic situation from others, and opens them to the risk of inter-generational debt and a poverty trap which is very hard to escape.

Now consider the impact on these four groups of a serious drought. Livestock and their owners are affected in three ways. First, animals sicken and some of them die: the herd size reduces. Second, the proportion of animals in milk is reduced, with impact on nutrition and income. Third, the sale price per animal is reduced, undermining the value of animal sales as a coping strategy. Wealthier households can afford to bring in fodder and even water, or move their animals to a less hazardous environment, providing some protection against the shock. Even if half their animals still die, they are left with a viable herd and can rebuild. Poor households are more exposed to the hazard, with fewer resources available to mitigate it, and are less able to cope. If three animals out of four die, their situation becomes perilous.

This means that these four groups do not sit on a simple wealth continuum, but are substantially different from each other. These differences mean that the impact of shocks (such as drought, price changes, floods, or external assistance) are felt quite differently by the different groups.

This means that in some cases, the impact may be greater on the poor than the very poor. Since the very poor in some cases own no livestock and virtually no assets, a shock which damages assets (for example, by killing or weakening livestock) may have proportionately less impact on them than on the poor. Since their income relies on labour, they are to large degree dependent on the success (or failure) of wealthier households.

2.4.3 Key findings: the importance of seasonality

All the reports are constructed around an understanding of seasonality in the livelihoods of the affected population, and they apply this understanding to different degrees. The HEA report is explicit in its analysis of the impact of seasonality on prices, incomes and expenditures through the year, and interweaves this to some degree with a gender calendar analysis.

It's important to recognise that festivals associated with Ramadan have a different effect each year on expenditure and income (for those with surplus livestock) as they follow the lunar calendar rather than an annual one, and therefore fall ten days earlier each year.

It's also worth noting the gradual impact of climate change on seasonality, although this topic gets insufficient attention in most of the reports (the SDNA provides some analysis). While it's important to support communities to deal with the immediate hazards they face, resilience building implies that they are better equipped to deal with the evolving, changing hazards of the future. Projections are available that describe the likely impact on total rainfall, rain distribution, cropping seasons, temperatures, water availability and flood hazards. These projections need to form a more substantial part of the situation analysis.

2.4.4 Key findings: alarming levels of poverty: high levels of exposure to repeated shocks

The reports are fairly clear (and again, the HEA is probably the most explicit) that a large proportion of the population are below the poverty line. This table is drawn from the HEA and shows data from the reference year which is used as a baseline and shows a 'normal' season:

	very poor	poor	middle	better off
JM01: Jamshoro irrigated wheat	0.67	0.73	1.18	1.71
UN02: Umerkot irrigated chili	0.53	0.50	0.86	1.28
TH07: Thar desert agro-pastoral and labour	0.38	0.42	0.51	0.63
TH03: rain-fed crops and livestock	0.38	0.45	0.71	1.50

Table 4: total (food and cash) income per person per day by wealth group in USD

Compare these figures (which combine food and cash) against the ADB poverty line for Pakistan which is calculated at \$1.51 pppd: this suggests that the large majority of people living in these zones are below the poverty line in normal times. Note, however, that this national rate does not reflect the very different lifestyles of the different groups. In irrigated areas, even very poor households need income to pay for farming inputs. In pastoral communities, expenditures are generally low.

In drought years (and these include 2013-14, 2014-15) the impacts are multiple, and typically include:

- Reduced crop production, especially in rain-fed areas
- Increased prices for foodstuffs
- Reduced prices for livestock
- Reduction in herd size and viability
- Increased labour migration
- Reduced income per migrant labourer

However, these factors interact and the results may not be obvious. In the 2015 drought, for example, the consumer price of wheat flour actually fell, reflecting high production in irrigated zones and an integrated market system.

Flood impacts typically include the following for affected areas:

- Displacement, and temporary or permanent loss of shelter and assets
- Increased prices for crops grown in the irrigated zone
- Reduced labour rates
- Increased collection and sale of firewood

2.4.5 *What the reports don't say*

It's interesting to explore what the formal reports do not say. There are a number of underlying issues that simply do not feature – and not because they are not present and evident. They all relate to issues of power: control and influence by members of some groups in society over others. It's possible to speculate why these topics so rarely find voice in the reports. Reasons might include:

- fear of alienating part of the target audience for the report;
- difficulty in raising issues which other reports have ignored or skirted around;
- official or unofficial 'policy' that certain issues 'do not exist';
- misplaced respect for 'traditional culture';
- a focus on mandated technical 'food security' issues at the expense of complex contextual problems.

So how do the reports address issues of power and control?

Almost all reports discuss gender: it's almost impossible for them not, of course. But they do so in a fairly cursory manner, reporting (for example) that women are involved in all stages of agriculture, or outlining their roles in the household. Gender is used in targeting, specifically for households headed by women. But there is little if any analysis of the power relations between men and women, the specific impact on households headed by women, or guidance on targeting different types of interventions. This undermines the value of the reports in terms of designing interventions. There is no discussion of transformative change.

Some of the analysis talks about power relations between groups in the community, typically between landlords and sharecroppers or labourers. Where the author is concerned about the impact of this relationship it is described as 'feudal' which appears to be shorthand for 'exploitative', although what this means in practice is not spelled out.

A large proportion of the population are highly exposed to repeated shocks and suffering from the effects of chronic extended poverty – and the reports are clear about this. But they are much less explicit in saying that this is the result of a system which deliberately maintains these inequalities because they benefit those in power, and because those without the power are somehow 'lesser' and it's perceived to be acceptable to treat them in this way. This exploitative system embraces all aspects of people's lives and transcends generations: it puts people into debt, keeps them in debt, and ensures that their offspring remain in debt. It closes development opportunities, even while presenting itself as protective and supportive.

Two linked factors underpin these inequalities: religion and caste. Only the SDNA report recognises the existence of either, discussing food use in 'minority communities' (Hindu) and asking about the caste of the head of household in the survey tools (but then not using this information in the analysis). The other reports ignore these topics: the status quo appears to be protected by a culture of denial and silence, and by long historical and cultural precedent. Until these issues are acknowledged as a fundamental part of the problem, until these inequalities are tackled directly, then efforts to improve the situation of the poor and very poor, to strengthen their resilience, to diversify their livelihoods, to help them climb out of crippling debt – these efforts are doomed to achieve little.

Some of these issues began to be explored as the group worked together through the problem tree exercise (below), and came out in more depth during the discussions around the final presentations: evidence of a good working relationship, but perhaps a little late to feed into the thinking around project design.

2.4.6 *the problem tree exercise*

As noted in section 2.3, this was not a typical SRAF process with a clearly defined single problem against which to identify and compare response options. In order to fully explore the issues relating to two broad hazards – flood and drought – the problem tree exercise was adapted and broadened. A 'traditional' problem tree exercise starts with the immediate problem (for example, food shortage at the household) and repeatedly asks the question 'why' to try to identify root causes and explore the interconnectedness of various factors.

In this case, groups focused on either drought or flood hazards, and – since these are big topics, not specific components – were encouraged to expand the problem tree up, down and sideways to understand the full range of impacts, the structural causes, and the breadth of interconnected factors.

Classic problem trees tend to present causality as a linear chain of events, which is helpful in identifying root causes and seeking solutions that address these (for example low productivity or poor access to markets) in addition to dealing with symptoms (hungry people). The wider approach adopted in the workshop also reached down to root causes, but the groups also identified some areas where negative feedback loops were

present. For example, school attendance is low in some areas and this affects educational achievement, which in turn contributes to low agricultural productivity. Yet low productivity itself contributes to low school attendance, as the family priorities are focussed on production. Education is not valued by parents, and this attitude trickles down the generations. Similar negative feedback cycles were identified in terms of health outcomes and debt traps. Identifying such cycles is very helpful as the cycle itself can be seen as an underlying cause of vulnerability, and breaking such cycles contributes to resilience building.

The individual problem trees are not reproduced here: the purpose of the exercise was to maximise the breadth of potential entry points in preparation for the next exercise. However, the following table illustrates the idea of these four levels using examples from the problem trees generated:

Outcomes	Displacement, no safe place to live Disease Malnutrition
Proximate (immediate) causes	Loss of shelter and assets Death or sickness of herd animals Contaminated water Crop failure
Underlying causes	Poor market access and infrastructure Low educational attainment Weak early warning systems
Structural (root) causes	Structural inequality between groups Inter-generational debt

Table 5: examples of the four levels in the problem trees

2.4.7 The current situation

The purpose of the exercise was more to understand the potential situation than the actual one. However, the 'current situation' also includes the exposure to hazards and the levels of preparedness. In summary, then, at the current time:

Drought: there is a moderate threat of a poor season ahead. Medium term projections from non-government sources are for a moderate monsoon season. Official government projections come too late to be useful in planning. Threat comes as much from late notice and low levels of resilience, as from high levels of hazard risk.

Floods: there is a moderate risk of flood in any monsoon season, largely due to poor maintenance of infrastructure. In the event of heavy rains in the north, around three weeks lead time can be expected before floodwaters reach these areas.

Preparedness: overall, this appears weak. Early warning systems are under-developed, and response planning is traditional in outlook and reactive in nature.

Chronic poverty is the critical factor, reinforced by the socio-economic system, cultural aspects of land ownership, the supposedly defunct caste system, inter-generational debt and under-development. This chronic poverty is neither accidental nor inevitable. The causal factors are well known to everyone involved, yet (as noted above) rarely make it into the formal reports or analysis.

2.5 The analytical framework for SRAF

2.5.1 Developing the framework

An analytical framework provides the means to understand the data being reviewed, in order to make useful comparisons and reveal additional meaning. For SRAF this means being able to disaggregate programme options in order to make useful comparisons between them. Given their different purposes, each of the source documents uses a different framework to make its analysis, appropriate to the purpose of each process. For example, two frameworks are compared below:

HEA Framework	PCMA Framework
Livelihood Zone (4 selected)	Identified critical market (two selected)
Wealth group (4 identified)	Normal year and shocks compared
Food, income and expenditure broken down and investigated separately	Prices, volumes and numbers of actors at different stages of the value chain
Reference year and shock situation compared; consideration of market prices and coping strategies	Top, middle and bottom... to be completed

Table 6: comparison of frameworks: HEA and PCMA

First, it was clear that drought and flood needed to be dealt with separately, although there was a recognition that a few areas were exposed to both hazards.

A long list of other factors was considered, with the aim to simplify the framework by combining or prioritising as far as possible. For example, it was found to be possible to largely combine hazard with geography and livelihood, so as to reduce the number of different categories for the response option analysis. However, administrative areas (districts and smaller divisions) were less helpful as categories.

The situation analysis and review of the documentation had emphasised that wealth groups were really distinct – especially those without assets - and these needed to be considered separately. Interventions aimed at livestock owners, for example, will often miss the very poor. The problem trees had identified that there were some aspects which could be tackled by market level interventions, advocacy with state actors, or (for example) through improving infrastructure – and the framework needed to embrace these. Finally, there was a clear distinction between activities aimed at preparedness, those meeting immediate needs, and recovery focused interventions. After some trial and error, the following framework was agreed:

Hazard	Livelihoods	Target	Timing	Before	During	After
			Purpose	Disaster preparedness, resilience and capacity building Contingency planning Early warning early action	Emergency response	Early recovery Rehabilitation and reconstruction Development
Flood	Typically, areas with irrigated agriculture	Households with no land and few assets				
		Other poor people				
		Other				
Drought	Typically, areas with agro-pastoralist livelihoods but may include irrigated areas	Households with no land and few assets				
		Other poor people				
		Other				

Figure 6: the analytical framework used to categorise response options

Two areas were given particular attention in the discussion but were not included in the eventual framework, with participants agreeing instead to address them through the proposals directly. These were gender and seasonality.

It was felt that gender issues, along with other issues of power, influence and control, should be considered within each proposal. This was not to undermine the importance of these considerations, but simply because the concept was not helpful as a way of classifying response options in order to make fair comparisons.

Seasonality was relevant to this process, but it was felt that it was also largely covered by the timing component: absorbed within the categories ‘before, during and after’ the shock. Where proposed interventions had seasonal specificity, this would be covered in the project description.

Some projects might be appropriate at more than one phase – groups were encouraged to write them up separately to ensure that every response option was properly considered.

2.5.2 Aligning the framework with administrative areas

Some of the participants sought additional clarification about which administrative areas were included in which category. The following table was developed to clarify the situation, since the administrative boundaries were not found to be useful for this task. Note that some districts contain areas of both flood and drought risk, and that flood risk includes both riverine flood and flooding from heavy rains.

Flood risk	Drought risk
30% of Jamshoro District: <ul style="list-style-type: none"> • Jamshoro, Kotri, • Manjhand, • Sehwan. 	100% of Tharparkar District:
90% of Umerkot District: <ul style="list-style-type: none"> • Kunri, • Samaro, • Pithoro, • Umerkot 	30% of Umerkot District: <ul style="list-style-type: none"> • Umerkot, • Pithoro.
	70% of Jamshoro District: <ul style="list-style-type: none"> • Thano Bola Khan, • Manjhand, • Sehwan • Kotri.

Table 7: cross referencing administrative areas with the areas in the analytical framework

2.6 Identifying potential responses to identified problems

2.6.1 Agreeing the response option description format

Before setting out to identify the possible response options, the participants agreed a standard format for the project descriptions. The aim was to provide sufficient information to clearly describe the project, without limiting the number of projects that could be identified and described. A single page format was agreed, following the logic of the analytical framework, as follows:

Response Option Name:
Hazard addressed:
Timing: Before / During / After; Seasonality
Target of intervention: Very poor, poor, or other (describe)
Outline description:
Indicative cost / unit: state unit (person, household, community, trader, etc)

Figure 7: the short format for response option descriptions

2.6.2 Identifying possible response options

Working in four groups with mixed membership, participants were given ample time to discuss and think widely about the various options open to them. In order to open the discussion up as widely as possible, participants were encouraged to think ‘out of the box’ and not to dismiss any idea at this stage – to write them all up briefly and subject them to scrutiny later. To stimulate a wide range of ideas, a number of prompts were given throughout the day, as shown in the diagram below:

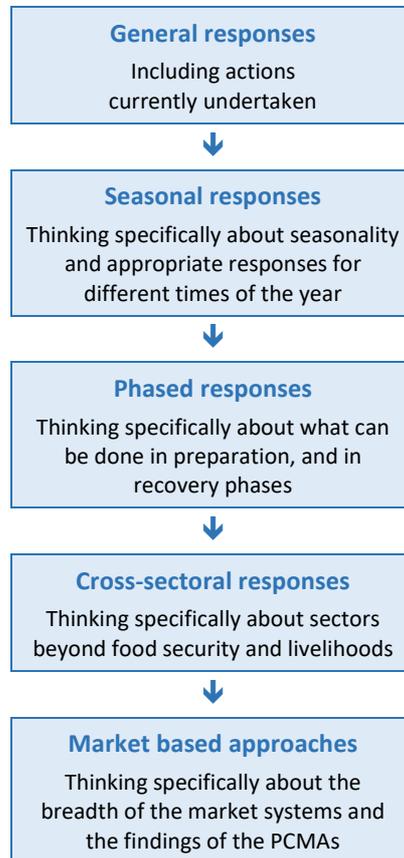


Figure 8: focus areas used for identifying response options

2.6.3 Categorisation and review

As projects were gradually added to the portfolio, they were categorised according to two of the elements of the analytical framework and fixed to the long wall of the meeting room where others could see them. This was fairly effective in removing duplicates (although at times groups were working on similar ideas in parallel) and also effective in stimulating new ideas. Over the course of the day almost 100 projects were considered and documented, reducing to 84 once duplicates had been removed. Similar projects with differences of modality were retained, although in some cases projects could have been further combined (see the tables in sections 2.8 and 2.9 for more details).



Figure 9: documented response options begin to be clustered into six categories

Before a drought

Water tank for rain catchment
 Capacity building of relevant stakeholders
 Influence government to form a district level drought management plan
 Vaccination for livestock
 Awareness of preservation of food fodder and water
 Capacity building of district level department of drought emergency preparedness
 Deworming and vaccination of livestock
 Cash for Insurance
 Advocate with government to minimise tax on humanitarian responses
 Increase HH storage capacity through rainwater harvesting for drinking water purposes
 Advocate for government to formulate desert policy
 Increase communal water storage capacity through rainwater harvesting infrastructure
 Advocate with government for flood management plan
 Advocate with government for creation of drought security plan
 Destocking of livestock
 Capacity building of vendors for electronic cash transfer
 Establishment of markets for natural substances

During drought

Livestock emergency assistance to drought affected communities
 Provision of health assistance - medical camps
 Transport voucher programme for health access
 Blanket distribution of nutrition supplements to affected population
 Nutrition and health response
 Cash for training to enhance the capacity of drought affected communities
 Awareness on crop diversity
 Education system - attendance incentives
 Training hygiene awareness
 Social Safety Net
 Access to drinking water
 Transportation voucher for livestock
 Food aid and cash support
 Livestock vaccination
 Livestock camp establishment
 Inclusion of gender, age and disability

Recovering from drought

Restocking
 Bio-saline agriculture
 Drought advocacy with key stakeholders
 Early Warning System (mobile network)
 Facilitate market accessibility small livestock owners
 Rainwater harvesting - HH level
 Provision of drought tolerant hybrid seeds
 CMAM programme for malnourished population
 Drip Irrigation system
 Solar water pumps
 Promoting alternate livelihood
 Value chain management of local products in drought affected areas
 Conditional cash transfer programme for drought affected
 Fodder storage warehouse market project
 Alternative income programme

Before a flood

Reforestation
 Integrated agriculture flood preparedness
 Raised beds for livestock assets
 Capacity building of district level government on flood emergency response
 Advocacy with government for food security plan
 Community based disaster risk management
 Building community resilience on livestock
 Integrated flood preparedness
 Value chain management and strengthening market system
 Advocate with government to minimise and lessen (the need for) humanitarian response
 Cash for insurance
 Capacity building for vendors on CTP electronic cash transfer

During flooding

Food assistance
 GFD
 Emergency camping in flood
 Evacuation of community from flood to safe areas
 Blanket distribution of nutritional supplement
 Distribution of NFI kits
 Establishment of temporary learning centres
 Emergency WASH programme
 Establishment of health facilities
 Cash assistance to flood affected
 WASH
 WASH
 Emergency fodder in camps

Recovering from flooding

Fodder provision for herd rehabilitation
 Rehabilitation of farm to market roads through CFW
 Capacity building of PDMA's
 Conditional cash transfer programme
 Crop variety replacement
 Policy level advocacy with key stakeholders
 Integrated livelihood and nutrition intervention
 Agriculture input to flood affected communities
 Integrated flood preparedness
 Restocking assistance through voucher programme
 Rehabilitation of water holes, water courses and land

Table 8: 84 response options were generated during the third day of the workshop

2.7 Developing a scoring mechanism for the responses

2.7.1 Overview

The next stages in the SRAF process are to identify and apply scoring criteria. Given the large number of proposals, it was proposed to have a fairly short list of scoring criteria to make the process manageable. Time was spent on discussing and agreeing these criteria to make them as relevant, appropriate and inclusive as possible, while keeping the number of criteria to a minimum.

In order that the criteria are applied as uniformly as possible, each possible score for each criterion was given a description, and time was also spent ensuring that everyone had a common understanding of the each. Each criterion needed to be described on a range from -2 to +2 as follows:

-2	-1	0	+1	+2
There are serious concerns raised about this aspect of the project	Some concerns are raised about this aspect of the project	A normal typical project would score a zero	This project is better than average or has notable benefits	This project is exceptional in this aspect

Table 9: the scoring system from -2 to +2

2.7.2 Identifying criteria for scoring

Selecting criteria is a challenging process, even when comparing competing approaches to address the exact same problem. The wide scope of this SRAF process was a particular challenge at this stage, since poorly chosen or described criteria could result in very unfair scoring. After considerable debate, the following criteria were agreed upon for the scoring process:

Do No Harm	This encompasses aspects of protection, gender sensitivity, acute vulnerability, and the risks of negative impacts on the target group or other actors or stakeholders to the process. It is understood that any intervention which benefits one group may have less beneficial impacts on other groups, and that these should be weighed, compared and minimised.
Root causes vs symptoms	This was included to try to increase the weighting on the systemic issues that underpin the situation, be those human, societal or environmental.
Longer term aspects	This includes aspects of environmental protection, longer term sustainability and resilience building. Humanitarian relief assistance was scored as +1 for this criterion.
Theory of change	This aspect sought to measure the robustness of the intervention logic: if the activities were undertaken as described, what degree of confidence is there that the outputs would be attained? Are risks manageable and addressed?
Cost effectiveness	Compared to other interventions seeking to achieve similar aims, is this option good value for money? What impact will the programme have for how many people for how much money? Note that this measure combines the cost (money) with a measure of quality (value).
Appropriateness	How well does the intervention fit with policy and preferences of the various stakeholders? Will it be unacceptable to any of them?

Table 10: the six selected criteria used to compare response options

2.7.3 Describing the scores

Once the criteria had been agreed, it was necessary to ensure that the understanding of them was common between groups. Again, work took place in plenary to ensure this common understanding, and the following scoresheet was developed and agreed.

	+2	+1	0	-1	-2
Do No Harm / Protection	The project actively supports community cohesion, minimizes and mitigates against negative impacts.	The project contributes to community cohesion and reduces protection concerns	The net benefit to vulnerable target groups outweighs any negative impacts	The balance of positive and negative outcome is roughly equal	The project puts individuals or groups at risk, or increases tensions within or between communities, or reinforces inequalities.
Root causes	The project identifies and strongly addresses root causes, structural issues or chronic problems	The project addresses some of the underlying causes	The project meets a short-term need for the full duration of the problem; addresses proximate causes	The project does not address underlying causes and only some of the proximate causes	After the project people will quickly return to their pre-project situation
Longer term perspectives	The project actively builds resilience, has positive environmental impacts	The project has a moderate positive impact on longer term issues. (Include immediate basic needs here if no other evidence).	There is no evidence, or the programme is neutral in terms of long term	The project may have negative impacts on environment and/or climate	The project has negative environmental impacts, or reduces resilience or preparedness; increases risk
Theory of change	There is strong likelihood that programme activities lead directly to intended outcomes in the operational context	There is a likelihood that project activities will deliver project outcomes	Programme activities are expected to contribute to outcomes; programme risks are moderate	The risks associated with the project may undermine the internal logic	Project risks are high; internal logic is weak – no confidence that activities will lead to intended outcomes
Cost effectiveness	The project provides intended outputs for low cost in an appropriate timeframe, and is relatively cheaper	The project provides intended outputs for relatively low cost in an appropriate timeframe	The project represents reasonable expenditure to achieve the objectives	The project outputs are relatively expensive and could be achieved by other means	The project is expensive for the intended outputs and outcomes
Appropriateness	The project demonstrates a strong alignment with government and community needs and priorities	The project demonstrates a strong alignment with either community or government priorities	no evidence or neutral	The project is poorly aligned with either government or community priorities	The project is culturally inappropriate or in conflict with government policy

Table 11: the detailed scoring matrix for the response options

2.7.4 Applying the ranking to the response options

In order to give each response option the best consideration, five new groups were formed to score each project. Everyone was given a copy of the scoring system set out in Table 11, and a score sheet was put on the wall for every new group to score every project against the six agreed criteria.

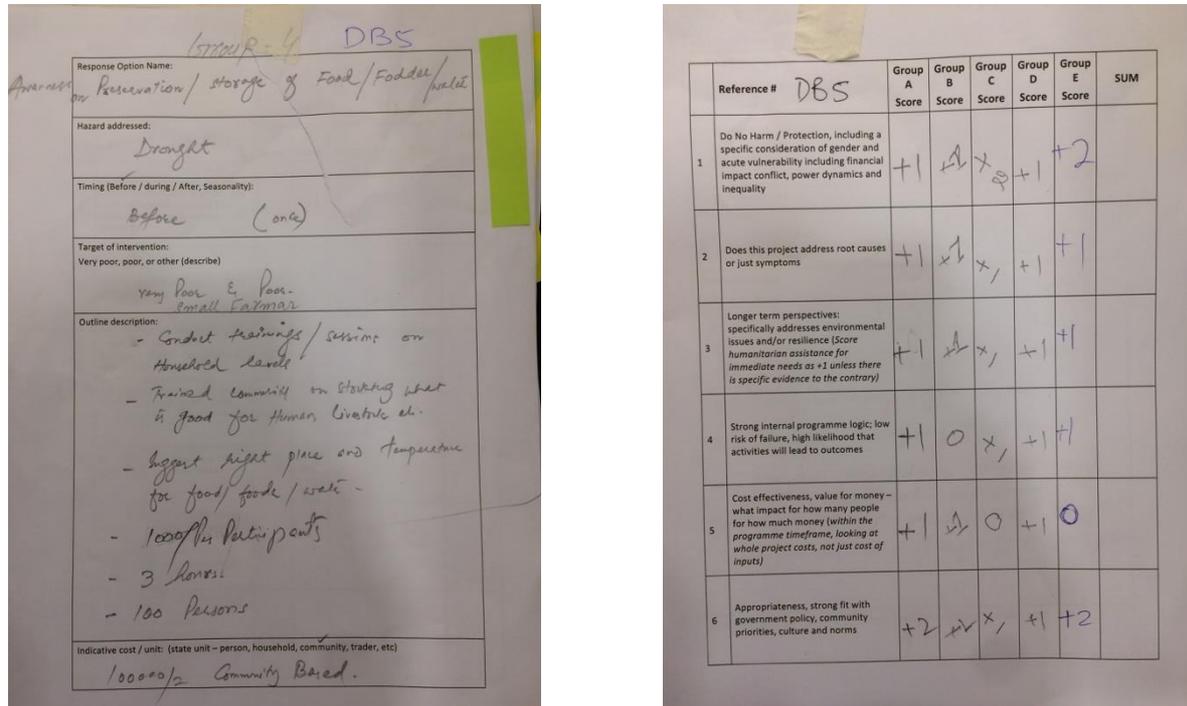


Figure 10: a typical response option description and associated score sheet

Once every group had scored every proposal, a method was needed to choose one score and transfer them to the ROCT spreadsheet (Response Option Comparison Tool, see below). This spreadsheet requires integer data entry.

In most cases it was simple to determine the most appropriate answer. If three groups scored the same (say, +1), one group higher and one lower, then the modal answer was chosen. In some cases, the situation was more complicated, in which case the standard deviation and the mean were also considered. This task was undertaken overnight by the consultant in order not to delay the workshop, but the spreadsheet used to determine the most appropriate result is available as an annex to this report.

2.7.5 The ROCT spreadsheet

The ROCT spreadsheet is a tool designed by the consultant which has been used for similar exercises in a number of situations including complex multi-sectoral project design processes in Malaysia and Haiti. It includes modules for costing programme elements and developing HR plans, but these were not used in this instance.

The ROCT tool allows the following data to be entered:

- The scoring criteria and matrix (as per Table 11)
- A separate ranking for the criteria, to vary the weighting associated with each (not used in this analysis)
- The analytical framework (with each sector or area being added on a separate sheet)
- The names of the projects and a short description (and much other data besides)
- The scores for each project against the criteria

The ROCT spreadsheet provides as an output a ranked list of projects within each sector (or element of the framework), and also ranked across the sectors/elements. It highlights projects that score -2 on any factor, and considers the total negative score per project.

The ROCT spreadsheet uses colour coding to make visual analysis easier: green cells are high scoring, yellow average, and orange and red poor.

2.7.6 The results

The results from the six sheets are combined into a single overview page to allow simple comparison. Below is a screenshot from that overview page showing the results for the response options associated with the drought hazard during the emergency phase:

Ref:	Short Title	Do No Harm	Root Causes vs Symptoms	Longer term	Theory of Change	Cost Effectiveness	Appropriateness	Score	# of negative scores	Total negative score	Score as % within sector	Score as % overall
DD01	Livestock emergency assistance to drought affected communities	-1	0	0	1	1	2	3	1	1	38%	33%
DD02	Provision of health assistance - medical camps	2	0	0	1	0	2	5	0	0	63%	56%
DD03	Transport voucher programme for health access	2	1	1	1	1	1	7	0	0	88%	78%
DD04	Blanket distribution of nutrition supplements to affected population	2	0	0	1	1	1	5	0	0	63%	56%
DD05	Nutrition and health response	2	0	0	1	0	2	5	0	0	63%	56%
DD06	Cash for training to enhance the capacity of drought affected communities	1	0	0	1	0	1	3	0	0	38%	33%
DD07	Awareness on crop diversity	2	1	1	1	0	2	7	0	0	88%	78%
DD08	Education system - attendance incentives	2	0	0	1	0	1	4	0	0	50%	44%
DD09	Training hygiene awareness	1	-1	0	1	0	1	2	1	1	25%	22%
DD10	Social Safety Net	2	0	0	1	0	1	4	0	0	50%	44%
DD11	Access to drinking water	2	0	0	1	1	2	6	0	0	75%	67%
DD12	Transportation voucher for livestock	1	-1	0	-2	0	0	-2	2	3	-25%	-22%
DD13	Food aid and cash support	1	0	0	0	0	2	3	0	0	38%	33%
DD14	Livestock vaccination	2	0	2	1	1	2	8	0	0	100%	89%
DD15	Livestock camp establishment	2	1	0	0	1	2	6	0	0	75%	67%
DD16	Inclusion of gender, age and disability	2	0	0	0	1	2	5	0	0	63%	56%

Figure 11: sample results from the ROCT spreadsheet

Within each component of the framework, the highest scoring response option (in this case DD14) is used as a benchmark and the others allocated a score as a percentage of this maximum. Projects within this part of the framework typically scored slightly lower than the overall, as shown in the final column.

The wide range of response option types considered by the participants is clear from this small selection – evidence of the effectiveness of the process, but also a challenge when comparing very different options in this very direct way. The scores were used as the main factor – but not the only factor – in selecting response options for further analysis.

Each group of participants worked through all 84 proposals in plenary and looked at the scores, before identifying which projects to focus on in the following session.

The full list of results can be seen in the annex, while the summarised project descriptions are included within the narrative below.

2.8 Drought

This section presents the response options identified and described for drought response, in the order they were documented.

2.8.1 In preparation for drought

Ref	Title	Description / activities	Timing	Target	Outcome
DB01	Water tank for rain catchment for livestock	Expansion of existing water harvesting programme for those without access, rehabilitation, community training	February	drought affected villages	Increased water availability for livestock use
DB02	Capacity building of relevant stakeholders	LEGS training, CLEW training	Ahead of drought season; also in recovery phase	Small agro-pastoralist HH without land	better herd management
DB03	Influence government to form a district level drought management plan	Advocacy; support to formulation of mitigation plan; community awareness		District government	increased resilience at district level
DB04	Deworming and vaccination for livestock	Provision of transport assistance; deworming campaign with livestock department; training	3 rounds of 1 month	Poor and middle	livestock increased disease resistance
DB05	Awareness of preservation of food fodder and water	household level training and sensitisation;		very poor and poor	behaviour change
DB06	Capacity building of district level dept. of drought emergency preparedness	better understanding of drought; early warning system; emergency response; preparation of multi-sectoral plan		government officials > poor and very poor	improved drought response
DB07	Behaviour change middle men	strengthen market linkages, raise awareness			stronger market linkages
DB08	Cash for Insurance	provision of CFW linked to insurance provision and sensitisation			better protection from impact of drought
DB09	Advocate with government to minimise tax on humanitarian responses	Advocacy to reduce tax burden on humanitarian supplies		government	more cost-efficient response
DB10	Increase HH storage capacity through rainwater harvesting for drinking water purposes	household level rainwater harvesting and rehabilitation		poor and very poor	Increased water availability for household use
DB11	Advocate for government to formulate desert policy	Advocate with government to develop a desert policy, since nothing currently exists		government; whole drought-affected population	policy in place and implemented
DB12	Advocate to increase budget for health and social safety nets	Awareness raising; community awareness; meetings with elected representatives; meetings with legislators; research and evidence generation; communication and media campaign		Government	increased safety net

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Ref	Title	Description / activities	Timing	Target	Outcome
DB13	Community based disaster risk management	Establish DRR forum; Early warning system; capacity building; formation of community committees; develop linkages from community to government; trainings on food/fodder; nutrition groups and education		Various, integrated	more resilient community
DB14	Advocate with government for creation of drought security plan and policy	Lack of food security policy to be remedied through advocacy and technical support		government	Policy in place and implemented
DB15	Destocking of livestock	Identification of cut-off period to start destocking; identification of appropriate market for livestock selling; training of communities on saving mechanisms		Poor and middle	Reduced herd size, reduced environmental impact, higher survival rates
DB16	Capacity building of vendors for electronic cash transfer	Work with vendors during cash transfer programmes to increase capacity for managing electronic payments		Vendors / traders	More effective transfers
DB17	Establishment of markets for natural substances	Diversification of livelihoods, consensus on marketing and transportation; eg Aloe Vera; training; start at local level		Various	Diversified livelihoods and lower exposure to drought hazard

Table 12: response options described to prepare for drought

2.8.2 During a drought emergency

Ref	Title	Description / activities	Timing	Target	Outcome
DD01	Livestock emergency assistance to drought affected communities	Livestock fodder package	during/ after	small agro-pastoralist without land	herds survive through the drought
DD02	Provision of health assistance - medical camps	Appointment of doctors, set up of camps, provision of medical kits, health awareness sessions on family planning vaccination etc	From October to May	drought affected communities	health outcomes improved
DD03	Transport voucher programme for health access	Voucher provision to allow affected people to use transport to access health facilities far from their homes	From October to May	drought affected remote communities	health outcomes improved
DD04	Blanket distribution of nutrition supplements to affected population	Humanitarian collaboration with government, awareness raising,		young children, pregnant and lactating mothers	improved nutrition
DD05	Nutrition and health response	control of epidemic diseases; accessible food; water provision, cash distribution		whole community	health outcomes improved
DD06	Cash for training to enhance the capacity of drought affected communities	3 days of livestock management training for women in 3 cycles		women, agro-pastoralist communities	improved livestock health

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Ref	Title	Description / activities	Timing	Target	Outcome
DD07	Awareness on crop diversity	introduction and support of drought resistant seed varieties; crop diversification reduced water use;	throughout year	wage labourers	improved yields
DD08	Education system - attendance incentives	child feeding, incentives for teachers;	March to August	whole community, small farmers	education outcomes, child nutrition improved
DD09	Training hygiene awareness	5 days health awareness training for women	March to August	women, agro-pastoralist communities	health outcomes improved
DD10	Social Safety Net	Expanded social safety net for the very poor, via electronic cash transfer			purchasing power increases
DD11	Access to drinking water	Water tanking at village level; for HH and livestock use	March to August	affected households	maintain health of people and livestock
DD12	Transportation voucher for livestock	to move animals to livestock camp during worst times (and back again afterwards) see DD15		Poor, very poor small farmers	
DD13	Food aid and cash support	cash for work concept	March to August	Very poor and poor	
DD14	Livestock vaccination	vaccination and deworming; veterinary camps	Start Jan-Feb, throughout the year	all livestock	maintain health of livestock
DD15	Livestock camp establishment	Camp at the community level in location with access and water. Insurance to protect animals. Coordination with govt.	March to August	whole community	
DD16	Inclusion of gender, age and disability	Training package on mainstreaming; data collection and SADD; application of minimum standards for gender age and disability		government workers	

Table 13: response options described for drought emergency response

2.8.3 Recovering from drought

Ref	Title	Description / activities	Timing	Target	Outcome
DA01	Restocking	Provision of one / two small ruminant to affected households through livestock voucher fairs	after drought	poor and very poor households with losses	rebuild herd, improved gene pool
DA02	Bio-saline agriculture	raise awareness of drought resistant crops and varieties; strengthen government capacity		Rain-fed agric; poor and very poor	increased yield
DA03	Drought advocacy with key stakeholders	Advocacy with government and non-government stakeholders; capacity building with government; contingency planning		government	better preparedness

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Ref	Title	Description / activities	Timing	Target	Outcome
DA04	Early Warning System (mobile network)	Joint system between government, FAO, building on indigenous knowledge; mix of high and low tech; messaging to last mile.		system	better warning, clearer actions
DA05	Facilitate market accessibility small livestock owners	access to credit; collective truck access; fodder vouchers; mobile phone app		poor people, small livestock owners	better market access, more profitable
DA06	Rainwater harvesting - HH level	Construction and rehabilitation		drought affected households, very poor and poor	improved water access household level
DA07	Provision of drought tolerant hybrid seeds	Provide millet, sesame and others.		Landowners and sharecroppers	improved yields
DA08	CMAM programme for malnourished women and children	treatment of SAM and MAM and PLW cases; infant and young child feeding; screening of U5; dietary diversity, raise awareness; support groups for mothers.		mothers and young children	health outcomes
DA09	Drip Irrigation system	Design efficient drip irrigation gardens; establishment of gardens; community education		poor households with land for gardens	increased yield and efficiency
DA10	Solar water pumps	for household and livestock use		All - wage labourers	improved access to water
DA11	Promoting alternate livelihood	Identification of skills gaps; establishment of skills training centre; provision of skills training; market linkages		Poor and very poor; youth	diversified income
DA12	Value chain management of local products in drought affected areas	Identify local products through market survey. Value chain study; product identification and market strengthening		Poor, very poor; market system	diversified income
DA13	Conditional cash transfer programme for drought affected	identify and register based on malnourishment; provide awareness training; cash assistance over hunger period	3 months hunger gap	Poor and very poor; malnourished	malnutrition reduced
DA14	Fodder Storage Warehouse Market Project	Warehouse receipt system for fodder; community owned storage trading system; raise awareness about flexibility and advantages.		sharecroppers	livestock resilience
DA15	Alternative Income Programme	skills teaching, vocational, handicrafts, sewing, beekeeping, poultry, horticulture, pickle-making, computer literacy, construction of driers and stoves: off farm income		men and women, sharecroppers	increased and diversified income

Table 14: response options described for drought recovery

2.8.4 The drought response options

There is an overlap between the proposed projects in the preparation and recovery phases, which is to be anticipated. The majority of proposed projects would seek to mitigate the outcome or address the proximate causes. These include:

- improving access to water, and making better use of scarce water resources, through water harvesting, emergency trucking, or introducing drought tolerant seeds and drip irrigation;
- improving access to and management of fodder through a variety of voucher schemes and awareness raising, or by bringing livestock together and managing them jointly
- maintaining livestock health through deworming and vaccination
- cash transfers and direct support to affected population, service provision in health
- restocking after the event

Other projects seek to address some of the underlying causes, including

- building capacity of the affected population in a range of ways, from traditional (nutrition and hygiene awareness, agricultural extension) to more innovative and potentially transformative (alternate livelihoods such as off-farm activities)
- diversification of livelihoods through better use of market systems, identifying and creating new markets,
- improving school attendance and supporting better nutrition in children
- strengthening the safety net for the very poor.

It's notable the number of projects that include the word 'advocacy'. Project descriptions include reference to the need for a drought management plan, contingency planning, and early warning systems, as well as a stronger safety net and a variety of other development aspects relating to service provision in health and education and livelihoods. This implies gaps in the current policy framework, and suggests a partnership approach is essential, with government agencies in the lead and other agencies, NGOS and civil society supporting from technical, resourcing and community engagement approaches.

Finally, a few projects use non-traditional approaches to the problems, or seek to address the problems closer to the root causes: looking at market systems (DB07, DD12, DA05, 12 and 14), providing incentives for education (DD08) or providing the data to use to address inequality within the system (DD16).

However, none of the listed projects seeks to address the structural inequalities identified in the deep roots of the problem tree, which came up again in the presentations and plenary discussions on the final day of the workshop. It must be recognised that addressing these – which admittedly fall outside the narrow technical remit of government departments and food security specialists – is fundamental to addressing the more immediate issues on which the workshop was focused.

2.9 Flood

2.9.1 In preparation for flood

Ref	Title	Description / activities	Timing	Target	Outcome
FB01	Reforestation	Reforestation and riverbank stabilisation; prefer local species, shade, edible, fruiting with strong root system; <i>neem</i> and <i>toolhi</i> .		whole community, high risk areas	Reduced risk of flooding
FB02	Integrated agriculture flood preparedness	food and fodder storage; livestock vaccination; seed banks; comms equipment; pre-stocking, boats, generators, and identification of safe areas; creation of village committees;		villages and key stakeholders	Better response and recovery
FB03	Raised beds for livestock assets	Build raised land to protect livestock; acquire soil by excavating dam; cash for work	CFW in quiet season	farm labourers and asset owning farmers	increased resilience for owners of livestock
FB04	Capacity building of district level government on flood emergency response	understanding the drought emergency; early warning system; flood emergency response; multi-sectoral preparedness plan		Government officials	Improved outcomes for flood affected

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Ref	Title	Description / activities	Timing	Target	Outcome
FB05	Advocacy with government for food security plan	No food security plan is currently in place. Awareness raising and influencing.		Government officials	Integrated food security plan improves outcomes for flood affected
FB06	Community based disaster risk management	Awareness raising on flood risk and mitigation; school safety, evacuation training, boat handling; water safety; swimming lessons		Whole village, schools, public organisations etc	Community resilience is enhanced
FB07	Building community resilience on livestock	Raised beds / platforms for livestock protection; DMC at village and UC level and capacity building; Early warning system and evacuation plans; capacity building of farmers on appropriate crops.		poor and others	Livestock resilience
FB08	Value chain management and strengthening market system	Market survey to identify potential stakeholders for key food and non-food items; value chain management of products needed at time of flood		Market actors	Diversified incomes
FB09	Advocate with government to increase budget on health and social safety nets	Organise multi-stakeholder seminar for awareness raising; community awareness campaign; meeting with elected representative; meeting with logistician; research and evidence generation; communication and media campaign.		Various	Stronger baseline resilience
FB10	Advocate with government to minimise the taxes on humanitarian response	High taxes on humanitarian supplies affects cost value. Influence govt. to reduce taxes		Government	Improved efficiency
FB11	Cash for insurance	Insurance policy for crop protection, life insurance and livestock; linked CFW programme to enable poor people to purchase insurance		Very poor; poor	Increased resilience
FB12	Capacity building for vendors on CTP electronic cash transfer	vendors lack skills and knowledge. Capacity building ahead of flood problem		Market traders	Market system and preparedness strengthened

Table 15: response options described to prepare for flooding

2.9.2 During a flood emergency

Ref	Title	Description / activities	Timing	Target	Outcome
FD01	Food assistance	Targeted food assistance to children and targeted households		targeting children and those with specific	Food needs met
FD02	GFD	WFP food assistance to whole affected community.			Food needs met
FD03	Emergency camping in flood	Creation of temporary tented camps for flood-displaced	June to Sept	For displaced communities	People have safe and secure location and needs are met
FD04	Evacuation of community from flood to safe areas	coordination with government / army to safely move displaced people	as required	For displaced communities	people are safely transported to camps

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Ref	Title	Description / activities	Timing	Target	Outcome
FD05	Blanket distribution of nutritional supplement	awareness raising and distribution of supplements	3 months June to Sept	children and PLWs	improved nutritional outcomes
FD06	Distribution of NFI kits	Standard NFI kits distributed to displaced / affected households	June to Sept	flood affected	people have essential items
FD07	Establishment of temporary learning centres	School established at camp setting; teachers identified and appointed, equipment provided	June to Sept	displaced	education is maintained
FD08	Emergency WASH programme	Provision of to clean drinking water; HH water treatment; awareness raising; toilet / pit latrine provision; washing facilities, soap etc; children forums; vector control; school hygiene clubs; mass media campaign. (Also see DD11, 12)	June to Sept	affected communities	health outcomes
FD09	Establishment of health facilities	Health facilities established at camps	June to Sept	displaced	health provision is maintained
FD10	Cash assistance to flood affected	Cash for work, clearing of irrigation channels etc; CCG for training on various activities	June to Sept	v poor and poor, flood affected	income to meet basic needs,
FD11	WASH	(see 08, 12)			
FD12	WASH	(see 08, 11)			
FD13	Emergency fodder in camps	Fodder kit contains wheat straw and other concentrates		those with livestock in camp	Maintain herds

Table 16: response options described for flood emergency response

2.9.3 Recovering from flood

Ref	Title	Description / activities	Timing	Target	Outcome
FA01	Fodder provision for herd rehabilitation	Supply new livestock; facilitate market restoration; provide fodder and veterinary care for surviving livestock; restore heard health, capacity building		labourers; those previously owning livestock	stronger rebuilt herds
FA02	Rehabilitation of farm to market roads through CFW	CFW to rebuild flood-damaged roads and impve market access		poor affected communities	
FA03	Capacity building of PDMA's	Build centres for flood displaced; train in evacuation; raise awareness of role of DDMA / PDMA; provision of boats; planning		government officials and institutions	better flood response
FA04	Conditional cash transfer programme	Provision of multi-purpose cash associated with training		very poor and poor	increased purchasing power
FA05	Crop variety replacement	transition to varieties more suitable to variable climate - long term project		sharecroppers	better yields
FA06	Policy level advocacy with key stakeholders	Advocacy on policy issues; micro and management levels; capacity building of government officials; contingency planning		government and non-government stakeholders	better flood response

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Ref	Title	Description / activities	Timing	Target	Outcome
FA07	Integrated livelihood and nutrition intervention	conditional cash modality; nutrition sensitisation; training.		women	stronger livelihoods and nutrition
FA08	agriculture input to flood affected communities	provision of seasonal crop package; cash for training on agriculture / livestock		very poor, poor; market strengthening	improved agricultural resilience
FA09	integrated flood preparedness	Floodwater drainage; health check on livestock; rehabilitate river channels; water treatment for consumption; reconstruction of road infrastructure		community level	recovery from flood impacts
FA10	restocking assistance through voucher programme	voucher programme			herds restored
FA11	rehabilitation of water holes, water courses and land	cash for work		poor people in affected communities	irrigation, prevention

Table 17: response options described for flood recovery

2.9.4 The flood response options

Once again, there is an understandable cross-over between the preparedness and the recovery phases in terms of programme options. There is also an emphasis on integrated responses, which is good in terms of programme design but not terribly helpful for a comparative exercise (which seeks to look at the value of the different interventions prior to combining them into a package of assistance).

Again, the majority of the proposed ROs focus on the immediate needs of the flood affected population, or the direct impact of floods. From the human side, that includes nutrition, water, shelter, and education. In terms of livestock: water, fodder and shelter. There's also a focus on damage to infrastructure, with interventions to protect or repair roads, irrigation systems and river banks.

The emphasis on the role of government is again evident, with several projects suggesting advocacy or capacity building of government institutions, though less than in the drought affected and desert areas.

With the exception of the advocacy / capacity building suggestions and a couple of proposals that look at market systems (FA08 and 12; FA02) there are few projects in the list that look beyond the proximate causes. None of the projects identified in the list would seek to tackle the structural imbalances that perpetuate the current high-risk situation.

One project does propose an innovative approach to managing risk, and this is included in the six projects shortlisted for further development, described in the section 2.10 New and innovative proposals.

2.9.5 Looking at the scores by hazard and phase

We can consider the level at which the various response options suggested would operate. The problem tree exercise identified problems at four levels: outcome, proximate, underlying and structural. We might expect that response options in the 'before' and 'after' phases to focus on underlying and structural problems, while the 'during' phase focuses on outcome and proximate levels.

	Flood			Drought		
	before	during	after	before	during	after
Outcome	1	11		1	9	2
Proximate		2	5	4	6	8
Underlying	9		5	9		5
Structural	2		1	3	1	

Table 18: numbers of response options at each level of the problem tree

We can also consider the average score of each of these categories, again giving some sense of the confidence in various phases

	Flood			Drought			Totals
	before	during	after	before	during	after	
Outcome	4.00	5.55	-	5.00	5.11	6.00	5.33
Proximate	-	6.50	4.40	7.25	3.33	5.25	5.04
Underlying	7.00	-	5.20	5.11	-	5.80	5.86
Structural	5.50	-	5.00	6.33	5.00	-	5.71
overall	6.50	5.69	4.82	5.82	4.44	5.53	5.27

Table 19: average response option score at each level of the problem tree

This is interesting. Since time was given for a wide range of possible response options to be developed in each category, the scores can be seen as an indication of the confidence that participants have that the humanitarian system as a whole can meet expectations – even when the new and innovative programming is factored in. The scores show a lack of confidence generally in response options designed to respond to the immediate impacts of drought, and suggests that response options for flood recovery are also generally less well thought of. Flood preparedness has the best scoring response options by a considerable margin, and underlying and structural response options score more highly for flood than for drought, for example.

2.10 New and innovative proposals

Once the results were collated and fed back to the participants, it was necessary to identify a small number of projects to write up in a bit more detail, to present to the senior representatives attending the workshop on the final day.

2.10.1 Selection of six proposals

It was decided to exclude projects which scored poorly on the Do No Harm criterion, and focus on those seen by the participants as new, innovative, or particularly promising for other reasons.

The response options selected were not necessarily the highest scoring, for two reasons. First, the SRAF process is best used as a guide to thinking analysis, not as a rigid decision-making tool. Secondly, many of the activities currently undertaken quite properly score quite highly, but there is not much point duplicating these and writing them up in detail again.

That said, some of the selected projects are current activities or are under consideration. The descriptions here may include additional components, or new approaches.

Three of the projects focus on drought affected areas, and the other three are applicable to both drought and flood affected areas.

The proposals are included below as they were submitted by participants with only minor changes for formatting and clarity. Comments are included at the end of each proposal in the section titled 'other considerations'.

The six selected proposals were:

- Livestock camps during drought
- Destocking, on the basis of a drought warning
- Diversification of livelihoods for the poor and very poor
- Introduction of drought and flood resistant crops
- Weather / losses insurance for increased resilience
- Strengthening climate and early warning systems

2.11 Proposal: Livestock camps

Livestock is the most important source of income particularly in arid zone areas (specifically, Tharparkar) where people mostly rely on livestock as important livelihood source. Livestock also contributes to health and nutrition of people.

In emergency situation, livestock are highly affected and many disease outbreaks occur which result in increased livestock mortality, and vulnerability.

The project is to establish livestock camps at community level to bring all animals at one place for their proper vaccination and treatment during emergency time.

2.11.1 Objectives

To minimize the risk of livestock mortality

To enhance immunity systems in animals during emergency.

2.11.2 Target group

Affected population owning small and large animals.

2.11.3 Methodology

Establish centre point at Union Council level

Assign 1 veterinary officer and 2 stock assistants at each camp

Transportation to bring livestock to camp locations.

Provision of livestock services for all kinds of animals

Provision of space and livestock shelters to keep livestock at camps.

Provision of fodder and water for all kind of animals

2.11.4 Stakeholders and their roles

Government:

Provide technical supports in terms of resource persons, vaccination and medicines of all kind of animals.

Disseminate information through media campaign about livestock camp

Humanitarian actors:

Address immediate response and short terms needs of livestock.

Establish Livestock camps at community level

Provide fodder and vaccination for livestock

Raising awareness session on livestock and vaccination among the community

Provide transportation to bring animals at camps.

2.11.5 Timeframe and seasonality

This activity is usually designed during emergency situation either flood or drought situation.

Flood: July - September

Drought: September - December.

2.11.6 Risk and Assumption:

Risks

Spread of any type of outbreak at camps

Food poisoning due to sudden change in variety and type of fodder

Chance of theft/stolen of animals at camps due to large intensity of camp.

Assumptions

Proportion of animals' health will be improved and risk of outbreak will be minimized

Livelihood source will be maintained and lactating animals milking production will be maintained.

2.11.7 Other considerations

This proposal describes bringing livestock together to a safe space during drought, in order to more easily provide fodder, water and veterinary assistance, in order to minimise losses. The project acknowledges that there may be challenges of acceptance within the community, and risks losses through theft or disease, and proposes some strategies to mitigate these.

Such camps could be organised at the community level or at a higher level, depending on the situation.

During the plenary discussion of this project the issue of insurance for the animals came up. When a large number of animals are brought together it is inevitable that some will become sick or die, despite vaccination and proper care, or be stolen (as identified in the text). Insurance and compensation would increase people's confidence to take part in the camp setting.

2.12 Proposal: Destocking

Livestock is the main livelihood sources of the drought-prone communities, followed by rain-fed agriculture. Livestock is the sector which bears larger portion of drought impact. An increased rate of livestock mortality and distress selling was reported by different studies during the last drought in Sindh. The communities wait until the last moments to see the rains in their areas but, when they see no rains, it is the time for them to sell their livestock. The time period communities chose to sell the livestock is not profitable for them because now their animals are nutritionally weak resulting, they earn 60% less rates as compare to the normal time selling. The destocking idea will help communities to save their 60% income which they lapse during the drought situation.

2.12.1 Objective

To minimize risk factors associated with the livestock during drought situation.

To improve financial capacity of livestock owners of drought prone area for sustaining remaining animals during drought period.

2.12.2 Target group

The target group is livestock owners in the drought prone area.

Population 1000 livestock owner households in 20 villages as a pilot.

Anticipated 10,000 animals will be de-stocked

2.12.3 Methodology

Mapping of livestock owner population along with number of livestock will be done through initial assessment. This assessment will help to calculate the number of animals which comes under risk category in case of drought situation. We will have clear picture of how much number of animals in the drought prone area will be sold out/died in case of anticipated drought situation.

Once anticipated number of at-risk animals is identified, now market assessment will be done in order to explore options to get good rates for the animal selling.

Communities will be sensitised about why de-stocking is important and what are its benefits for them.

Preparation of plan of selling animals in identified local markets for animal selling.

Communities may also be supported through transportation for selling animals in the identified markets.

Parallel to selling process, communities will be helped to open bank accounts in order to deposit the cash they earned through animal selling. 80% of the amount will be deposited in the account and rest 20% will be kept

by the communities in order to use for buying the fodder for the remaining animals and stock it before the drought situation.

Communities will also be helped on which potential fodders they need to buy and preserve. Fodder preservation training will also be organized for the communities.

Communities will also be helped to build linkages with livestock department in order to get their remaining animals properly vaccinated and de-wormed before the drought situation in order to build immune system of their animals.

The same communities will re-stock the animals after the drought situation through purchasing animals from local markets.

2.12.4 Stakeholders

Humanitarian sector: to lead the interventions and guide the communities for destocking.

District Livestock Department: for vaccinations, de-worming and guidance to communities for selling and managing the remaining livestock.

Community: livestock owners in the drought prone area

Livestock traders: these are potential buyers of the animals.

Fodder traders:

2.12.5 Timeframe and seasonality

The drought situation starts normally from August (Government of Sindh declares drought on 15th August). The all activities associated with de-stocking will take place one month before the drought declaration which means the month of July.

The re-stocking (the last component of the model) will take place once drought situation comes back at normal level and communities are sure that they may sustain the additional animals. This could be the months of August/September next year, once they have observed some rains in the area.

2.12.6 Risks and assumptions:

Risks

The idea is new so, community may not take interest in it. The no-interest of communities may fail the whole idea.

Communities may use the deposited income in the account during the drought situation for family needs, they may not leave the amount for restocking.

Assumptions

District Livestock department owns the idea, the department is keen to help communities for vaccination, de-worming, community awareness on fodder preservation and livestock management.

Livestock traders and markets are accessible and local markets have potential to absorb more supply of animals for selling.

2.12.7 Other considerations

This proposal describes the possibility of encouraging or incentivising destocking before the drought strikes, on the basis of a fairly firm prediction of a poor season. Once drought hits, animal health suffers and prices drop: early selling of healthy livestock provides a cash buffer for the drought season, and reduces the overall herd size, reducing the demand on limited resources. Once the drought has passed, new animals can be purchased using the cash.

This is a challenging project to implement, although there are models available from the Horn of Africa. It requires substantial preparation with the meteorological services (the warning must come sufficiently early), the traders and market actors, the communities, and of course potential donors. It may be necessary to provide incentives or loan capital to traders and middlemen to ensure they have capacity to take up additional sales.

Destocking programmes have been successful in other parts of the world with pastoral livelihoods, but they do require mobilisation and trust to be built. Successful examples can be found in Ethiopia and other parts of the Horn of Africa.

Options include incentivising traders to increase their capacity to purchase animals quickly. It's important that the whole market chain can support the increased volume of trade required. Local conditions will determine if the animals will be shipped live or slaughtered locally for meat sales.

Destocking works best in conjunction with medium-range weather forecasting, which identifies a drought season in advance of the deterioration in animal health.

This is an excellent example of an 'early warning early action' project, described in a little more depth below.

2.13 Proposal: Livelihood diversification for drought prone population

The drought prone population in Sindh have very limited livelihoods options. Livestock, daily wage labour and rain-feed agriculture are the only options which are available for the population. All the available livelihoods are affected whenever the area is hit by the drought. The communities switch to negative coping strategies in order to sustain themselves. The proposed concepts will help to increase the options of livelihoods for the communities so that they may sustain themselves through the drought situations without falling into the negative coping strategies. The proposed interventions will help to identify alternate livelihood options and engage the communities so that they may have diversified livelihoods in order to face the drought situations in future.

2.13.1 Objective

To reduce the vulnerabilities of the communities by increasing livelihoods options for them.

To train the communities to engage into the alternate livelihoods.

2.13.2 Target group

The target group is poor and very poor population in the drought prone area which is 68% of total population.

2.13.3 Methodology

The starting point for this intervention is exploration and mapping of potential livelihoods for the area. A detailed community based skills survey as well a marketing survey will help to understand the local context in terms of available potential skills and marketable skills and artisan work. The secondary data reflects that the area is rich with the embroidery and locally made indigenous hand made products, along with this, larger population comes under youth category (boys and girls) which are un-productive nowadays. There is potential to engage them with the marketable driven skills and businesses like; mechanic, mobile repairing, masonry etc. The above proposed studies will help out to understand the marketability of the above proposed skills/livelihood options.

Once potential livelihood options are identified, individuals will be explored from the targeted communities in order to form batches of the individuals as per the identified skills/artisan work.

A comprehensive training and skills enhancement program will be initiated in order to train the targeted individuals in the selected respective business/artisan work in order to make them able to prepare the products and modernize them at the level which is demanded by the current market.

The linkages development of selected individuals with the markets will be the major activity of the interventions. Various exhibitions and exposure visits will be organized in order to hunt the buyers.

All the individuals who completes the skills enhancement program, will be provided assets so that they may start their own business. The assets could be; mechanic tools, mobile repair kits, embroidery kit etc.

The lean period for the drought prone areas is from May till September, and it even prolongs if no rains occur in July/August. So, the good period for this intervention is January, so that communities are trained on the skills and they may have established their new livelihood business.

2.13.4 Stakeholders

Humanitarian sector: to lead the interventions on ground

Drought prone population, especially very poor and poor households.

Middleman, traders engaged in the business of embroidery, embroidery product selling boutiques,

Government training institutions which offers skills enhancement courses (STVETA)

2.13.5 Risks and assumptions:

Risk

Middlemen and the involved other business actors may violate the communities in terms of offering lower rates.

Assumption

Communities are interested to diversify their livelihoods

The buyers and middlemen are interested to be part of the new skills and products of the communities

2.13.6 Other considerations

This proposal seeks to help the poor and very poor out of their current poverty trap by providing them with additional, diversified sources of income. The project identifies some potential options, and other would be found through the studies proposed.

It's worth noting that powerful landowners typically oppose projects of this sort, often justifying their opposition with the twin arguments that they know what's good for their tenants, and that as responsible landowners, they have a duty of care. In fact, if very poor people were able to access secure alternate income they probably would, and the supply of labour would be threatened – and with it, the whole system would face a 'readjustment'.

However, given the low education levels of the very poor, their remoteness from markets and the challenging environment, access to additional income is likely to be fairly low, and the threat to the status quo likewise.

The importance of the market analysis should not be underestimated. It's also critical to include a package of basic numeracy and business skills alongside the technical training.

Projects such as this are worthy of a solid pilot and action research, with both social and financial evaluation built in.

2.14 Proposal: Introduction and provision of flood and drought resistant crops

Sindh province is particularly vulnerable to climate change and variability. Sindh is facing two different types of emergency situations: drought in the southern part and flood in the northern parts. Increases in temperature and erratic rainfall will result in more frequent and intense droughts, floods and severe weather. On the drought side the combination of increased temperatures and reduced rainfall is likely to result in considerable loss of agricultural and livestock outputs and a reduction in the extent of land suitable for rain-fed agriculture production of the staple crops, millet, guar, sesame, lentils etc. crops, and on the other side loss of small and large livestock animals (goats, sheep and cows). The impacts of climate-related hazards in drought affected districts (Tharparkar, Umerkot, Sangarh) have already severely disrupted food production, led to the displacement of communities, loss of livestock and other productive assets, and caused an overall reduction of community resilience. Crop failure due to low rainfall, coupled with loss of small animals has greatly reduced the impoverished communities' purchasing power. In Tharparkar District and the surrounding areas of Sindh Province, a third consecutive year of cereal production shortfalls due to drought, coupled with losses of small animals, has aggravated food insecurity and caused acute malnutrition.

Migration is one of the main coping strategies in the drought affected district of Sindh during the lean period but in 2014 the ratio increased due to severe drought which led to 35 % less opportunities of work for each migrant. Crops, especially rice, have been shown to suffer decrease in yields in changing temperatures. Severe droughts and flooding have dramatically resulted in shortfalls in rice yields. Changing rain patterns have severely impacted farming activities such as sowing and harvesting. Farmers whose fields rely on rainwater

complain about having to delay their land preparation due to long dry spell. It is estimated that rice prices will increase threefold in the next twenty years and that rising temperature may cause more than 30 percent production losses in rice farming communities that are unable to cope with intense heat.

There is therefore a compelling need to identify alternative crops which can withstand said impacts thereby contributing to food security being threatened by climate change. Climate change poses risks and vulnerability to the poor and marginalized communities in the target regions through its physical impacts. It negatively affects food and water security and livelihoods in the target regions. To safeguard these livelihoods, relevant responses to climate change have to be designed and implemented at several levels.

2.14.1 Objective

to reduce the vulnerability of farmers in disaster proven districts of the Sindh to increasing drought and rainfall variability, and enhance the capacity of farmers to plan for and respond to future impacts of climate change on food security, boost in local protein sources, decreased vulnerability of livestock to drought and increased local production of fodder.

2.14.2 Expected Outputs:

Drought resistant alternative crops will be grown locally with the support of agriculture; livestock departments and local knowledge.

The farmer field school approach will be applied to share information on how to grow these crops.

The agriculture and livestock department will be involved in the research and extension of this project at community level.

Data and knowledge on the impact of climate change, environmental degradation and natural disasters collected and made accessible to decision makers and government, private sector and civil society;

Coordination mechanisms and implementation arrangements for climate change, environment, natural resources, and disaster risk management established and used at provincial level and disaster-prone districts.

Linkages among all stakeholders (meteorological department, private sector, communities, DDMA, communities, NGOs etc.).

SMS dissemination by service provider in the disaster-prone areas, EWS messages through radio/FM channels.

2.14.3 Methodology

Government research and extension institutes will be involved in the implementation of this project. Research trials will be conducted at agriculture research departments and community lands. In parallel to this activity Farmer Field School (FFS) will be conducted with the farming communities to enhance their capacities on these alternatives cropping system. The organization will establish community organization and farmer groups who will be involved in this project; discrimination of knowledge with other community member, linkages with relevant stakeholders that are metrological department, government agriculture, livestock departments etc.

2.14.4 Timeframe and seasonality

At least six months project before the notification of drought by Government of Sindh.

2.14.5 Other considerations

This proposal is much more traditional in approach, looking at the identification and introduction of alternative crops or varieties better suited to cope with harsh conditions. Such projects are obviously attractive but the challenges are well documented: changing people's preferences is difficult, and new varieties sometimes require additional inputs in terms of specialist fertiliser or pesticide, or the seeds cannot be replanted, or there are issues associated with marketing. Efforts must be made to pilot new varieties with great care and not expose poor and vulnerably sharecroppers to additional expense.

The final comment about seasonality is relevant: this is a long-term project and should form part of the ongoing development processes.

2.15 Proposal: Insurance for increased resilience

Farming is vulnerable to unpredictability of nature, impact of disasters and other risk to farmers which cannot be taken lightly, which increase farming and livestock problems at community level. In case of natural disasters farmers bears the loss of their produced/crops /livestock and face the debit faults. Regarding all these conditions the interest and investment of farmers needs to be safe and insured.

Cash for insurance for livelihood and agriculture which has broad sense towards benefits of farming communities and livestock keeping communities regarding their sustainable and resilient. In this project, the insurance company/government and beneficiaries are involved in the cohesion.

2.15.1 Objective

To minimize the risk factors involved in agriculture during drought situation.

To improve and build resilience and enable poor farmers to strengthen their food security and improve livelihoods.

2.15.2 Target group

Vulnerable/affected communities of drought affected HHs with land, sharecroppers of Sindh arid zone.

2.15.3 Methodology

Farmers can access weather index insurance by paying with their labour through Insurance-for-Assets (IFA) schemes. When drought hits, compensation for weather-related losses prevents farmers from selling productive assets and stimulates faster recovery.

Through unique insurance-for-work (IFW) model, the poorest farmers, who participate in a government-run / humanitarian workers cash-for-work initiative able to pay for insurance through their labour on the long-term risk reduction projects identified through participatory vulnerability assessments.

IFA schemes are built into either existing social safety nets, disaster risk reduction schemes, or Food Assistance for Assets Programme. Assets built through risk reduction activities promote resilience by steadily decreasing vulnerability to disaster risks over time.

By protecting farmers' investments in case of a bad season, enables households to invest in riskier but more remunerative enterprises, as well as in seeds, fertilizers and new technologies to increase their agricultural productivity.

Savings for Change (SfC) Programme. Savings help build a stronger financial base for investing – but also act as a buffer against short-term needs and idiosyncratic shocks, such as illness and death.

To ensure long-term sustainability, project contributes to the creation of rural financial markets, by building the capacity of farmers, local insurance companies, and micro-finance institutions and gradually transitioning farmers to pay for insurance in cash

2.15.4 Stakeholders

Government:

Government supports this activity to subsidized premium to substances farmers.

Government financial institutions i.e state bank for legislation and policy on insurance.

Insurance company:

Provide insurance services to farmers on crop and livestock

Set premium amount for the assets crop

Provide losses in case of lower production of crop

Humanitarian actors:

Cash for work activities to pay for insurance through designing long-term risk reduction projects identified through participatory vulnerability assessments only for poor and very poor households.

Providing premium amount through engaging in structural activities.

Saving for change programme

2.15.5 Timeframe and seasonality

Agro-pastoral areas are totally dependent on rain-feeding and growing period starts early with monsoon period and ends till harvesting. Based on monsoon period growing period starts from July and harvesting till end of December each year.

2.15.6 Risk and Assumption:

Fluctuation in premium rates of government institutions

Risk outcome in such conditions when claim is due to insurance companies if parameters of cropping couldn't be taken into consideration.

Rules and regulation of premium institution in terms of paying big liabilities amount.

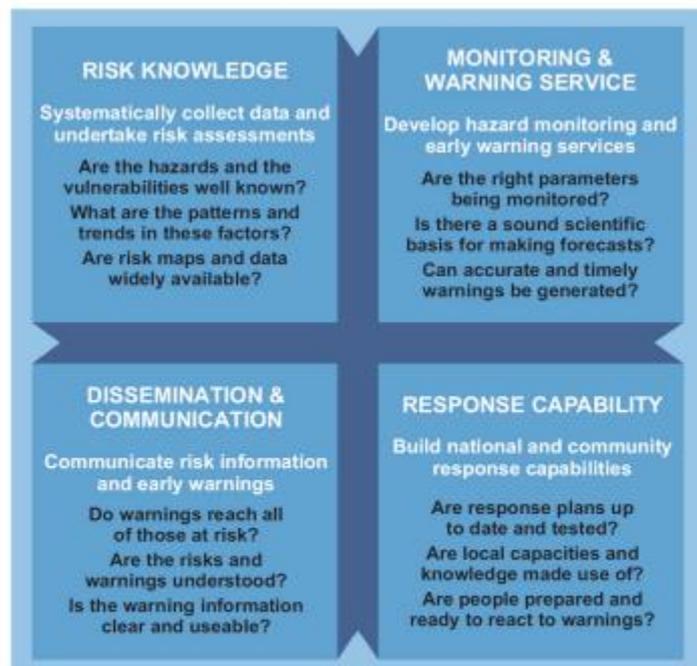
2.15.7 Other considerations

Insurance for poor farmers is an area of growing interest in many parts of the developing world. This proposal combines an expansion of the insurance model (currently very under-utilised in Pakistan) with a cash component which would lower the barrier to access the scheme. There may also be opportunities to subsidise the premiums, and the project would need to include a substantial information campaign and community mobilisation.

The proposal included both the insurance component, and a cash for work element to provide the means for farmers to purchase the insurance. A typical challenge of insurance schemes is identifying an objective threshold against which a payout is made. Governments are sometimes reluctant to declare a state of emergency, and in any case, there are a wide number of factors that inform such decisions. In some cases, satellite imagery is used to provide an independent measure of likely crop yields or availability of water or fodder.

2.16 Proposal: Strengthening climate information and early warning systems

Sindh province is particularly vulnerable to climate change and variability. Sindh is facing two different types of emergency situations: drought in the southern part and flood in the northern parts. Increases in temperature and erratic rainfall will result in more frequent and intense droughts, floods and severe weather. On the drought side the combination of increased temperatures and reduced rainfall is likely to result in considerable loss of agricultural and livestock outputs and a reduction in the extent of land suitable for rain-fed agriculture production of the staple crops, Millet, Guar, sesame, lentils etc. crops and on the other side loss of small and large livestock animals (goats, sheep and cows). The impacts of climate-related hazards in drought affected districts (Tharparkar, Umerkot, Sangarh) have already severely disrupted food production, led to the displacement of communities, loss of livestock and other productive assets, and caused an overall reduction of community



Four Elements of People-centred Early Warning Systems

Source: UNISDR Platform for the Promotion of Early Warning

resilience. Crop failure due to low rainfall, coupled with loss of small animals has greatly reduced the impoverished communities' purchasing power. Poverty is endemic in the sparsely populated district with acute malnutrition rates in children as high as 20 per cent, well above the emergency threshold of 15 per cent. The outbreak of sheep pox has aggravated the situation in Tharparkar, possibly having killed thousands of small animals, critical to household food security. According to authorities in Tharparkar district, Sindh province, 99 children and 67 adults (43 men and 24 women) have reportedly died in Tharparkar since the beginning of 2014 due to a combination of chronic malnutrition, a lack of access to effective health facilities, lower than average rainfall in Chachro, Diplo, Khinser, Islamkot, Mithi tehsils (sub-districts), and an outbreak of sheep pox. In Tharparkar District and the surrounding areas of Sindh Province, a third consecutive year of cereal production shortfalls due to drought, coupled with losses of small animals, has aggravated food insecurity and caused acute malnutrition. Migration is one of the main coping strategies in the drought affected district of Sindh during the lean period but in 2014 the ratio increased due to severe drought which leads them to 35 % less opportunities of work for each migrant. The development of climate information and EWS to increase climate resilience and support for effective adaptation planning for drought mitigation in preferred solutions.

2.16.1 Objective

The objective of early warning systems is to empower individuals and communities on weather, climate and hydrological monitoring capabilities, early warning systems and delivery of available information for responding to extreme weather and planning adaptation to climate change threatened by hazards to act in sufficient time and in an appropriate manner to reduce the possibility of personal injury, loss of life and damage to property and the environment in drought affected districts (Tharparkar, Umerkot and Sangarh) of Sindh.

2.16.2 Expected Outputs:

Capacity of relevant stakeholder on environment, natural resources, climate change and disaster risk hazards and management, and how to implement disaster early warning systems is strengthened.

Data and knowledge on the impact of climate change, environmental degradation and natural disasters collected and made accessible to decision makers and government, private sector and civil society;

Coordination mechanisms and implementation arrangements for climate change, environment, natural resources, and disaster risk management established and used at provincial level and disaster-prone districts.

Linkages are built among all stakeholders (metrological department, private sector, communities, DDMA, Communities, NGOs etc.)

SMS dissemination by service provider in the disaster-prone areas, EWS messages through radio/FM channels.

2.16.3 Stakeholders

Communities, particularly those most vulnerable are fundamental to people-centred early warning systems. They will be actively involved in all aspects of the establishment and operation of early warning systems and aware of the hazards and potential impacts to which they are exposed; and be able to take actions to minimize the threat of loss or damage.

Local governments, like communities and individuals, are at the centre of effective early warning systems. They will be empowered by national governments, have considerable knowledge of the hazards to which their communities are exposed and be actively involved in the design and maintenance of early warning systems.

Non-governmental organisations play a role in raising awareness among individuals, communities and organizations involved in early warning, particularly at the community level. They will be involved to assist with implementing early warning systems and in preparing communities for natural disasters. In addition, they will play an important advocacy role to help ensure that early warning stays on the agenda of government policy makers.

The private sector has a diverse role to play in early warning, including developing early warning capabilities in their own organizations. The media plays a vital role in improving the disaster consciousness of the general population and disseminating early warnings. The private sector also has a large untapped potential to help

provide skilled services in form of technical manpower, know-how or donations (in-kind and cash) of goods or services.

The science and academic community has a critical role in providing specialized scientific and technical input to assist governments and communities in developing early warning systems. Their expertise is central to analysing natural hazard risks facing communities, supporting the design of scientific and systematic monitoring and warning services, supporting data exchange, translating scientific or technical information into comprehensible messages, and to the dissemination of understandable warnings to those at risk.

2.16.4 Timeframe and seasonality

At least six months project before the notification of drought by Government of Sindh.

2.16.5 Other considerations

This proposal seeks to develop an integrated early warning system for drought and flood in the affected area, using upstream indicators and medium term meteorological forecasts. The absence of such a system presents a substantial gap in existing preparedness efforts.

Learning from other early warning systems emphasises the importance of 'last-mile' communication and reaching those in the most remote areas. Using a range of communication approaches is helpful, rather than relying on a single method. Messages should be explicit and contain both the warning itself, and some advice or guidance about what to do (and perhaps what not to do).

The key stakeholders to the process would be communities, both as experts in their own environment and as end users of the warnings provided; local governments in coordination, design and maintenance roles, NGOs working with communities and supporting planning for disasters as well as working on advocacy with government; the private sector in diverse roles associated with communications and response; and the academic community providing much of the technical input.

This is an ambitious project which should be grounded in government policy in order to succeed, but which is clearly very necessary and would add considerable value to the whole system.

3 Using the response analysis in contingency planning

3.1 Maintaining existing work in the field

While it is always tempting to invest in new ideas, the projects outlined through the SRAF process are only proposals, and should be piloted and tested. Existing, proven approaches should be maintained and new ideas introduced gradually and on the basis of objective comparison of impacts.

Indeed, existing projects often form the best basis for testing out new ideas – building on strong community relationship and trust.

3.2 Government policy and practice

Government participation in the workshop and SRAF process indicates a strong interest and engagement at the technical level. However, the response option proposals presented in the long-list strongly suggest a gap in the existing government provision, both in terms of operational capacity, but also at the strategic level: the absence of a comprehensive drought management policy, or policies for the arid zone, or flood management. There also appear to be gaps in disaster management structures at provincial and district level.

It has already been noted, the number of ROs which described advocacy with government at various levels, or capacity building of technical offices. This does not reflect a high degree of confidence in the existing system – although it is also worth noting that many of these proposals (DB02, 11, 12, and 14; DA03; FB09 and 10; and FA06) scored strongly overall (although FA06 – *Policy level advocacy with key stakeholders* – also scored a telling -2 on the robustness of its Theory of Change: the measure of confidence that the activities will lead to the described outputs).

Discussions in the final day of the workshop also highlighted a more fundamental concern: there is little recognition that the technical problems of crop yields and herd health are not going to be solved unless the structural underlying problems are addressed. The focus on the technical solutions (of which this SRAF workshop is arguably a part) may actually distract from the real and urgent issue of addressing the persistent inter-generational inequalities, and the exploitative power relationships between the landed and the landless, which keep the poor indebted and consequently perpetuate poor people's exposure to the hazards.

It seems unlikely that technical solutions alone will be sufficient.

3.3 Existing projects with low scores

It is in the nature of a ranking exercise that some proposals will score lower than others. If these are new proposals, then it may be sufficient to reject them in favour of others (although two low-scoring ROs made it into the final six). But what should we do if a low-scoring RO proposal describes an *existing set of activities*?

The following projects all exist or are under discussion currently in one form or another, and all scored below 4 or below in the ROCT ranking exercise.

Ref	RO title	Score
DB15	destocking of livestock	1
DD01	livestock emergency assistance to drought affected communities	3
DD06	cash for training to enhance the capacity of drought affected communities	3
DD08	education system – attendance incentives (recommended in PCMA wheat flour report)	4
DD09	training, hygiene awareness	2
DD10	social safety net	4
DD13	food aid and cash support	3
DA02	bio-saline agriculture	4
DA09	drip irrigation system	4
FD02	general food distribution (blanket – targeted food assistance scored 6)	3
FD03	emergency camping in flood	2
FD04	evacuation of community from flood to safe areas	4

Ref	RO title	Score
FA05	crop variety replacement	2
FA10	restocking assistance through voucher programme	3

Table 20: low scoring ROs which describe existing or planned activity

It's presumably not a coincidence that 9 of these 14 projects fall into the 'during' part of the framework: that 64% of the low-scoring proposals relate to emergency response activities. Looking at that whole section (see Table 13 on page 29) it's clear that very few responses at this time score well according to the criteria adopted by the participants. See also section 2.9.5 for some breakdown of scores against various frames.

This is actually common sense: one line of thought suggests that if there is a need for emergency response for drought, that suggests that preparedness and forecast-based actions have been inadequate. And these response options are being compared to preparedness and recovery actions, so it's unsurprising if they score poorly.

The question remains, as long as response *is* required, what should be done with these projects? It's entirely possible, of course, that the brief project description within the RO did not do justice to the actual project and misrepresented it, or that the participants failed to appreciate the benefits of the approach.

But it's equally possible that the projects received a low score for very valid reasons – especially where other alternatives to achieve the same objective may have scored better. But equally, a 'low scoring' project may not necessarily be a poor-quality project. The criteria selected for project quality by the participants emphasised longer term solutions, and addressing the core problems. In some cases, and especially in the emergency phase, these may not be the highest priorities. However, the low scores cannot simply be explained in these terms and then business continue as usual.

Agencies currently implementing projects which are similar to these described should review them, either internally or preferably through formal independent external evaluation. The TOR for the review might take into account the detailed scoring: was the low score down to theory of change or value for money? In addition to considering the impact and appropriateness of the activities, it may be valuable to consider alternate approaches in a comparative manner. The results of such evaluations should inform future contingency planning. Ideally, they should be jointly planned within a common framework, and the results shared – see section 4 for some suggestions on how this could be taken forward.

3.4 High scoring projects

Similarly, there are a number of ROs which scored well above the average. The following projects all scored 7 or more in the scoring exercise

Ref	RO title	Score
DB01	Water tank for rain catchment for livestock	7
DB04	Deworming and vaccination for livestock	8
DB05	Awareness of preservation of food fodder and water	7
DB06	Capacity building of district level department of drought emergency preparedness	7
DB10	Increase HH storage capacity through rainwater harvesting for drinking water purposes	7
DB11	Advocate for government to formulate desert policy	7
DB12	Advocate to increase budget for health and social safety nets	7
DB13	Community based disaster risk management	7
DB17	Establishment of markets for natural substances	7
DD03	Transport voucher programme for health access	7
DD07	Awareness on crop diversity	7
DD14	Livestock vaccination	8
DA03	Drought advocacy with key stakeholders	7
DA04	Early Warning System (mobile network)	7
DA08	CMAM programme for malnourished women and children	7
DA11	Promoting alternate livelihood	8
DA13	Conditional cash transfer programme for drought affected	7
FB01	Reforestation	9

Ref	RO title	Score
FB03	Raised beds for livestock assets	9
FB06	Community based disaster risk management	8
FB07	Building community resilience on livestock	8
FB08	Value chain management and strengthening market system	8
FB10	Advocate with government to minimise the taxes on humanitarian response	7
FD07	Establishment of temporary learning centres	7
FD08	Emergency WASH programme	7
FD10	Cash assistance to flood affected	7
FD11	WASH	8
FD12	WASH	8
FA03	Capacity building of PDMA's	7
FA09	integrated flood preparedness	7

Table 21: the list of 30 high-scoring ROs

It's clear that these projects should form the basis of action research with the flood-risk and the arid zones, for future inclusion in contingency planning.

Further, it can be seen that there is a hierarchy within these projects which in turn generates a critical path. Some are already common practice and can be prioritised for expansion, such as DB01 and DD14. Others can easily be piloted or implemented without further ado, such as FB03 and DD03. However, much of the more integrated or substantial work needs to sit within an enhanced policy framework which incorporates desert and arid zones, hazard risk management, and early warning systems, and these fundamental areas need to be prioritised.

3.5 Investment in coordination

Contingency planning is a coordinated exercise. It requires a wide range of stakeholders to agree on the appropriate ways forward and allocate roles and responsibilities against a specific set of events.

Coordination has been reasonable effective within the food security sector, as evidenced by the chain of needs assessments and higher level analytical studies undertaken over the last few years. This has generated a strong evidence base associated with the baseline situation, chronic needs, the hazards, the coping strategies adopted by different groups of people to those hazards, and the market context in which they operate.

The missing piece at this stage is a better understanding of the wider socio-economic context, the cultural and religious factors that reinforce the systemic inequalities which in turn support and prolong the problem of intergenerational debt, bonded labour, and the resultant poverty trap. This work of course goes beyond food security, but is necessary to inform all development and humanitarian action.

At the higher level of disaster preparedness, (beyond the food sector) the SRAF process did not provide confidence in a strongly coordinated system with well-defined roles and leadership, at the level of the provincial or state level disaster management agencies. If this perception is accurate, this would be a critical gap in terms of the application of the SRAF findings.

A strong, empowered disaster management agency operating in a supportive and complete policy environment is a necessary precursor to effective contingency planning and response.

3.6 Early Warning Early Action

The phrase Early Warning Early Action is used to describe a specific approach to contingency planning and preparation, that is gathering pace in the Horn of Africa and is especially appropriate to slow onset drought emergency. It is characterised by the approach of doing different things, not just doing the usual things earlier or quicker.

Early action in this sense means undertaking actions which actively reduce the threat or people's exposure to the threat, against a firm objective prediction of a poor season ahead, using pre-agreements to speed up activities.

It includes the following inter-connected components (adapted from the 2014 inter-agency report Early Warning Early Action, see <http://www.preventionweb.net/publications/view/42670>):

Early Warnings	<p>The first component of the system produces the warning itself. The early warning system includes three components: a process to monitor indicators, a contextualised analysis of their values and trends, and the means to communicate these findings. Such systems can be based on local observations and traditional knowledge, or a highly technical approach based on analysis of remote sensing data. National early warning systems often combine elements from both these approaches.</p> <p>While some of the products of these mechanisms are seasonal, annual or biannual, the main focus of this report is on rolling analysis, generated on a monthly basis or even more frequently.</p> <p>It's also worth making a distinction between a predictive warning (which considers future risk) and a surveillance system (which provides a snapshot of the current situation).</p>
Triggers for action	<p>Trigger points are thresholds or key changes in the indicators that make up the early warning system. For the system to work swiftly, these triggers for action need to be agreed in advance and objective in nature. Some triggers are simple changes in the value of an indicator, and others are more complex or nuanced</p>
Flexible funding	<p>Funding is required to implement the agreed actions. The mechanism by which this funding is released also needs to be agreed in advance, and tied to both the trigger and the action.</p> <p>Sign-off procedures must be swift and lightweight.</p>
Contingency plans	<p>Contingency plans for early action are distinct from traditional planning for humanitarian response. They must be agreed in advance, include specific strategies to 'surge' or increase human resource capacities, and ideally be linked to programmes or activities that already operate at scale.</p> <p>Plans should include contextualised analysis of response options, and build on existing capacity.</p>
A platform for dialogue and decisions	<p>The platform is the national forum where decision-makers from all the stakeholder groups agree on the appropriate early warning indicators, the thresholds for action, the process for contingency planning, the funding arrangements and the types of actions that would be appropriate at different phases in different contexts. This would normally build additional responsibilities into existing coordination architecture, rather than create new structures.</p>
An enabling environment	<p>In addition to the factors mentioned above, the following are also an essential part of the early warning, early action ecosystem:</p> <ul style="list-style-type: none"> A legal base for the early warning system and the coordination framework National ownership of the platform, with the Early Action agenda formally included within its mandate Transparency and trust, developing from a shared vision, a strengthened evidence base and a common commitment to open communication
Early action	<p>Together, these components create the possibility to take early action, on the basis of a prediction. Action is taken when agreed objective indicators cross an agreed threshold. This releases funding, or allows development budgets to be re-purposed for specific activities (for example, destocking).</p>

Table 22: components of an early warning early action system

4 Monitoring the use of the SRAF outputs

There is an opportunity to use the findings of the SRAF process (which in turn build on a comprehensive body of assessment and analysis) to develop an agenda for action research and improvement of both development and humanitarian strands of activity.

This implies that the food security working group adopts an approach which in which coordination is a precursor to active research and programme implementation within a shared framework.

4.1 Mapping of activities

In order to monitor the application of the findings of the SRAF process, the Food Security coordination function needs to know what activities are being undertaken. A mapping exercise of planned and current activities would be helpful, but the activities would first need to be classified. The SRAF process and outputs provide a basis to undertake that classification and mapping process.

A simplified list of activities (removing some of the overlap, and potentially combining the preparedness and recovery streams) could be used as the basis of this mapping process. This mapping could identify which activities were:

- Existing, moderate or high scoring, proven
- Existing, low scoring, in need of validation
- Proposed, for immediate introduction
- Proposed, for piloting
- Foundational to the overall response system

The mapping would also need to cover issues such as geographic focus, targeting of population (or other actors), scale, timing and budget.

4.2 Key indicators for monitoring implementation

Once the mapping has been developed and agreed by members of the FS working group, the next stage would be to use it to follow progress of the various options. The easiest way to achieve this is by following internal reviews and external evaluations. A meta-analysis of the effectiveness of the various approaches could be undertaken if (and only if) agencies are willing to share their evaluation reports, and all evaluations make reference back to the framework of activities.

For some of the activities in the 'proposed' section, a comparative approach could be adopted with different agencies agreeing to pilot different

The SRAF report also identifies higher level issues which should be monitored, including the apparent gaps in the coordination mechanism for emergency response, and weaknesses in the policy framework.

4.3 Using the SRAF process elsewhere

This report is deliberately detailed in terms of the process used to develop the outputs. This is in order to support a similar process being undertaken elsewhere in Pakistan without international facilitation. A limited and focused response option analysis can easily be done in a two-day period by a group of people with detailed programmatic knowledge of the situation and the hazards. It is strongly recommended, however, that the process be used to investigate a range of 8-12 options only, each of which is a response to the same, specific problem. A wide-ranging exercise like this one focused on 'flood' or 'drought' is much more challenging to facilitate, takes more time, and provides less concrete outputs.

5 Annexes

5.1 SRAF scoring table

Ref:	Short Title	Do No Harm	Root Causes vs Symptoms	Longer term	Theory of Change	Cost Effectiveness	Appropriateness	Score	# of negative scores	Total negative score	Score as % within sector	Score as % overall
Drought – before the emergency												
DB01	Water tank for rain catchment	2	1	1	1	0	2	7	0	0	88%	78%
DB02	Capacity building of relevant stakeholders	2	0	1	1	1	1	6	0	0	75%	67%
DB03	Influence government to form a district level drought management plan	2	1	1	1	0	1	6	0	0	75%	67%
DB04	Deworming and vaccination for livestock	2	1	1	1	1	2	8	0	0	100%	89%
DB05	Awareness of preservation of food fodder and water	1	1	1	1	1	2	7	0	0	88%	78%
DB06	Capacity building of district level department of drought emergency preparedness	2	1	1	1	0	2	7	0	0	88%	78%
DB07	Behaviour change middle men	1	1	0	1	0	1	4	0	0	50%	44%
DB08	Cash for Insurance	1	1	1	1	0	1	5	0	0	63%	56%
DB09	Advocate with government to minimise tax on humanitarian responses	2	0	0	0	1	0	3	0	0	38%	33%
DB10	Increase HH storage capacity through rainwater harvesting for drinking water purposes	2	1	1	1	0	2	7	0	0	88%	78%
DB11	Advocate for government to formulate desert policy	2	1	1	1	1	1	7	0	0	88%	78%
DB12	Advocate to increase budget for health and social safety nets	2	2	1	1	0	1	7	0	0	88%	78%
DB13	Community based disaster risk management	2	1	1	1	0	2	7	0	0	88%	78%
DB14	Advocate with government for creation of drought security plan and policy	2	0	1	1	1	1	6	0	0	75%	67%
DB15	Destocking of livestock	1	0	0	0	0	0	1	0	0	13%	11%
DB16	Capacity building of vendors for electronic cash transfer	1	0	1	0	1	1	4	0	0	50%	44%
DB17	Establishment of markets for natural substances	2	1	1	1	1	1	7	0	0	88%	78%

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Ref:	Short Title	Do No Harm	Root Causes vs Symptoms	Longer term	Theory Change of	Cost Effectiveness	Appropriateness	Score	# of negative scores	Total negative score	Score as % within sector	Score as % overall
Drought – during the emergency												
DD01	Livestock emergency assistance to drought affected communities	-1	0	0	1	1	2	3	1	1	38%	33%
DD02	Provision of health assistance - medical camps	2	0	0	1	0	2	5	0	0	63%	56%
DD03	Transport voucher programme for health access	2	1	1	1	1	1	7	0	0	88%	78%
DD04	Blanket distribution of nutrition supplements to affected population	2	0	0	1	1	1	5	0	0	63%	56%
DD05	Nutrition and health response	2	0	0	1	0	2	5	0	0	63%	56%
DD06	Cash for training to enhance the capacity of drought affected communities	1	0	0	1	0	1	3	0	0	38%	33%
DD07	Awareness on crop diversity	2	1	1	1	0	2	7	0	0	88%	78%
DD08	Education system - attendance incentives	2	0	0	1	0	1	4	0	0	50%	44%
DD09	Training hygiene awareness	1	-1	0	1	0	1	2	1	1	25%	22%
DD10	Social Safety Net	2	0	0	1	0	1	4	0	0	50%	44%
DD11	Access to drinking water	2	0	0	1	1	2	6	0	0	75%	67%
DD12	Transportation voucher for livestock	1	-1	0	-2	0	0	-2	2	3	-25%	-22%
DD13	Food aid and cash support	1	0	0	0	0	2	3	0	0	38%	33%
DD14	Livestock vaccination	2	0	2	1	1	2	8	0	0	100%	89%
DD15	Livestock camp establishment	2	1	0	0	1	2	6	0	0	75%	67%
DD16	Inclusion of gender, age and disability	2	0	0	0	1	2	5	0	0	63%	56%
Drought – following the emergency												
DA01	Restocking	1	1	1	1	0	1	5	0	0	63%	56%
DA02	Bio-saline agriculture	1	1	1	0	0	1	4	0	0	50%	44%
DA03	Drought advocacy with key stakeholders	2	1	1	1	1	1	7	0	0	88%	78%
DA04	Early Warning System (mobile network)	1	1	1	1	1	2	7	0	0	88%	78%
DA05	Facilitate market accessibility small livestock owners	1	1	0	1	0	1	4	0	0	50%	44%
DA06	Rainwater harvesting - HH level	1	1	1	1	0	2	6	0	0	75%	67%
DA07	Provision of drought tolerant hybrid seeds	1	1	1	0	1	1	5	0	0	63%	56%
DA08	CMAM programme for malnourished women and children	2	1	1	1	1	1	7	0	0	88%	78%
DA09	Drip Irrigation system	1	0	1	0	1	1	4	0	0	50%	44%
DA10	Solar water pumps	1	1	1	1	0	1	5	0	0	63%	56%
DA11	Promoting alternate livelihood	2	1	2	1	0	2	8	0	0	100%	89%
DA12	Value chain management of local products in drought affected areas	2	1	0	1	1	1	6	0	0	75%	67%
DA13	Conditional cash transfer programme for drought affected	2	1	1	1	0	2	7	0	0	88%	78%
DA14	Fodder Storage Warehouse Market Project	1	1	0	0	0	1	3	0	0	38%	33%
DA15	Alternative Income Programme	1	1	1	1	0	1	5	0	0	63%	56%

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Ref:	Short Title	Do No Harm	Root Causes vs Symptoms	Longer term	Theory Change of	Cost Effectiveness	Appropriateness	Score	# of negative scores	Total negative score	Score as % within sector	Score as % overall
Floods – before the emergency												
FB01	Reforestation	2	1	2	1	1	2	9	0	0	100%	100%
FB02	Integrated agriculture flood preparedness	2	1	1	1	0	1	6	0	0	67%	67%
FB03	Raised beds for livestock assets	2	1	1	1	2	2	9	0	0	100%	100%
FB04	Capacity building of district level government on flood emergency response	2	0	1	1	0	1	5	0	0	56%	56%
FB05	Advocacy with government for food security plan	2	0	1	1	0	1	5	0	0	56%	56%
FB06	Community based disaster risk management	2	1	1	1	1	2	8	0	0	89%	89%
FB07	Building community resilience on livestock	2	1	1	1	1	2	8	0	0	89%	89%
FB08	Value chain management and strengthening market system	2	1	1	1	1	2	8	0	0	89%	89%
FB09	Advocate with government to increase budget on health and social safety nets	2	0	1	1	1	1	6	0	0	67%	67%
FB10	Advocate with government to minimise taxes on humanitarian response	2	1	1	1	1	1	7	0	0	78%	78%
FB11	Cash for insurance	1	1	1	0	0	1	4	0	0	44%	44%
FB12	Capacity building for vendors on CTP electronic cash transfer	1	0	0	1	0	1	3	0	0	33%	33%
Floods – during the emergency												
FD01	Food assistance	1	0	0	2	1	2	6	0	0	75%	67%
FD02	GFD	2	0	0	1	-1	1	3	1	1	38%	33%
FD03	Emergency camping in flood	0	0	0	0	1	1	2	0	0	25%	22%
FD04	Evacuation of community from flood to safe areas	1	0	0	1	0	2	4	0	0	50%	44%
FD05	Blanket distribution of nutritional supplement	1	0	0	1	1	2	5	0	0	63%	56%
FD06	Distribution of NFI kits	2	0	1	1	0	2	6	0	0	75%	67%
FD07	Establishment of temporary learning centres	2	0	1	1	1	2	7	0	0	88%	78%
FD08	Emergency WASH programme	2	1	1	1	1	1	7	0	0	88%	78%
FD09	Establishment of health facilities	2	0	0	1	0	2	5	0	0	63%	56%
FD10	Cash assistance to flood affected	2	1	0	1	1	2	7	0	0	88%	78%
FD11	WASH	2	1	1	1	1	2	8	0	0	100%	89%
FD12	WASH	2	1	1	1	1	2	8	0	0	100%	89%
FD13	Emergency fodder in camps	2	0	0	1	1	2	6	0	0	75%	67%

Note: The scores for response options FD08, FD11 and FD12 are extremely similar, reinforcing the idea that these projects were basically identical and should have been combined prior to scoring.

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Ref:	Short Title	Do No Harm	Root Causes vs Symptoms	Longer term	Theory of Change	Cost Effectiveness	Appropriateness	Score	# of negative scores	Total negative score	Score as % within sector	Score as % overall
Floods – after the emergency												
FA01	Fodder provision for herd rehabilitation	2	0	0	1	0	1	4	0	0	57%	44%
FA02	Rehabilitation of farm to market roads through CFW	1	1	0	1	0	2	5	0	0	71%	56%
FA03	Capacity building of PDMA's	2	1	1	1	0	2	7	0	0	100%	78%
FA04	Conditional cash transfer programme	1	0	0	1	0	2	4	0	0	57%	44%
FA05	Crop variety replacement	1	1	1	-1	0	0	2	1	1	29%	22%
FA06	Policy level advocacy with key stakeholders	2	1	1	-2	1	2	5	1	2	71%	56%
FA07	Integrated livelihood and nutrition intervention	1	1	1	1	0	1	5	0	0	71%	56%
FA08	agriculture input to flood affected communities	2	0	0	1	0	2	5	0	0	71%	56%
FA09	integrated flood preparedness	2	1	1	1	0	2	7	0	0	100%	78%
FA10	restocking assistance through voucher programme	1	0	0	1	0	1	3	0	0	43%	33%
FA11	rehabilitation of water holes, water courses and land	2	1	1	1	0	1	6	0	0	86%	67%

Table 23: complete results from the SRAF scoring process

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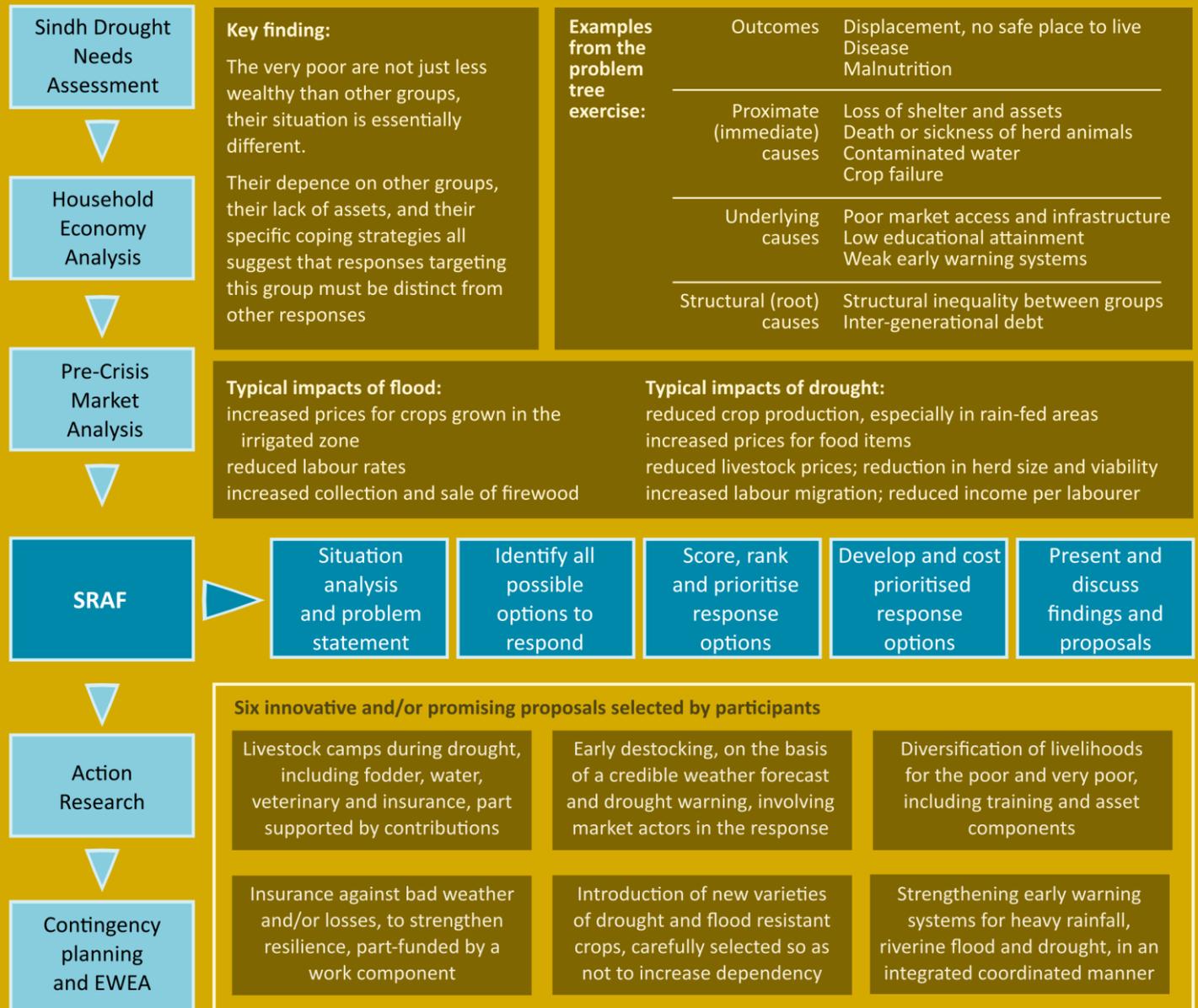
5.2 SRAF workshop participants

Ali Ahmed Channa	Director	Bureau of Statistics, Sindh	Karachi
Ali Dino	Program Manager	WHH	Hyderabad
Ali Muhammad Soomro	Agriculture Officer	Agriculture Extension	Jamshoro
Angeliki Dimou	FSWG Coordinator	FAO	Islamabad
Asfandyar Khan	Nutrition Officer	UNICEF	Karachi
Ashraf Ali	Project Coordinator	FAO	Hyderabad
Bashir Qazi	DFC	Food Department	Karachi
Dr. Aneel Kumar	Program Manager	TRDP	Umerkot
Dr. Faiz Muhammad Bhurt	Deputy Director	Livestock Department	Jamshoro
Dr. Ganesh	Deputy Director	Livestock Department	Jamshoro
Dr. Mazhar Iqbal	Programme Policy Officer (SUN) P&D	P&D Department Sindh	Karachi
Dr. Mohd Asif Kaimkhani	Veterinary Officer	Livestock Department	Tharparkar
Dr. Muzafar Vighio	Deputy Director	Livestock Department	Karachi
Dr. Nargiza Khodjaeva	Head of Office	UNICEF	Karachi
Dr. Sono Khangharani	CEO	TRDP Micro Finance Foundation (TMF)	Tharparkar
Dr. Umar khan	Nutrition Specialist	UNICEF	Karachi
Habib Wardag	Assistant Cluster Coordinator	FAO	Islamabad
Imran Ali Bughio	Field Officer	ACF International	Dadu
Ishfaq Solangi	Statistical Officer	Bureau of Statistics, Sindh	Jamshoro
Jalil Ahmed	Program Associate	WFP	Tharparkar
Jenevieve Hussain	Policy Advisor	FAO	Karachi
Khadim Shah	Programme Policy Officer	WFP	Karachi
M. Akram Bhatti	Deputy Director	Bureau of Statistics, Sindh	Karachi
Mehnaz Khan	Field Monitor	BEST-Pak	Umerkot
Muhammad Afzal	Information Management Assistant	FAO	Islamabad
Muhammad Ali Shaikh	Director Operations	PDMA Sindh	Karachi
Muhammad Umer Karim	Water Specialist	FAO	Karachi
Raja Ajmal Jahangeer	Statistician/Co-facilitator	FAO	Islamabad
Riaz Ahmed Dayo	Project Director	Planning & Development Department, Sindh	Karachi
Saki Ladho	Statistical Assistant	Bureau of Statistics, Sindh	Mirpurkhas
Sarfraz Ayaz	DFC	Food Department	Karachi
Shah Nasir Khan	Programme Policy Officer	WFP	Islamabad
Shafqat Ullah	Programme Inclusion & Agriculture Coordinator	Concern World Wide	Islamabad
Shahnawaz Ali	Program Assistant	FAO	Hyderabad
Zafar Khaskhali	Program Officer	TRDP	Jamshoro
Zaheer Udin Babar	Manager	TRDP	Tharparkar

Table 24: participants in the SRAF workshop and feedback sessions

SRAF Situation and Response Analysis Framework

Drought and Flood: Jamshoro, Umerkot and Tharparkar



Key finding:

The very poor are not just less wealthy than other groups, their situation is essentially different.

Their dependence on other groups, their lack of assets, and their specific coping strategies all suggest that responses targeting this group must be distinct from other responses

Examples from the problem tree exercise:	Outcomes	Displacement, no safe place to live Disease Malnutrition
	Proximate (immediate) causes	Loss of shelter and assets Death or sickness of herd animals Contaminated water Crop failure
	Underlying causes	Poor market access and infrastructure Low educational attainment Weak early warning systems
	Structural (root) causes	Structural inequality between groups Inter-generational debt

Typical impacts of flood:

increased prices for crops grown in the irrigated zone
reduced labour rates
increased collection and sale of firewood

Typical impacts of drought:

reduced crop production, especially in rain-fed areas
increased prices for food items
reduced livestock prices; reduction in herd size and viability
increased labour migration; reduced income per labourer

Recommendations - system wide:

The policy and planning framework is incomplete: fill gaps in policy for desert areas and disaster management for flood and drought, for example;

Strengthen the early warning system and use it to predict disasters rather than reacting to them;

Take effective action against structural inequality; acknowledge the problem and enforce and strengthen existing law;

Improve coordination between technical sectors.

Recommendations - next steps:

Map existing activities within the food security sector using the framework from the SRAF report;

Run formal pilots of proposed projects and share results;

Where existing work scored low in the SRAF, formally review projects and seek alternative approaches;

Share reviews, evaluations and learning;

Invest in coordination, specifically the work of the food security working group;

Develop formal, multi-sector contingency plans based on specific scenarios of drought and flood, and allocate roles and responsibilities;

Research the possibility of a formal **early warning early action** approach in the drought affected areas, including objective triggers for pre-financing