

PHASE 4:
DEVELOPING
INNOVATIVE
STRATEGIES
FOR CHANGE



*In this phase of Wayfinder we move from system assessment to strategic planning. Drawing on your understanding of **system dynamics**, the focus here is to design innovative strategies for adaptive or transformative change that address the dilemmas, while at the same time maintain **option space** in the system. Wayfinder emphasizes the need for strategies that help break entrenched patterns and “re-wire” social-ecological interactions so as to open up for sustainable, safe and just development trajectories.*

PHASE CONTENT

Module A: Preparing the ground for innovative solutions

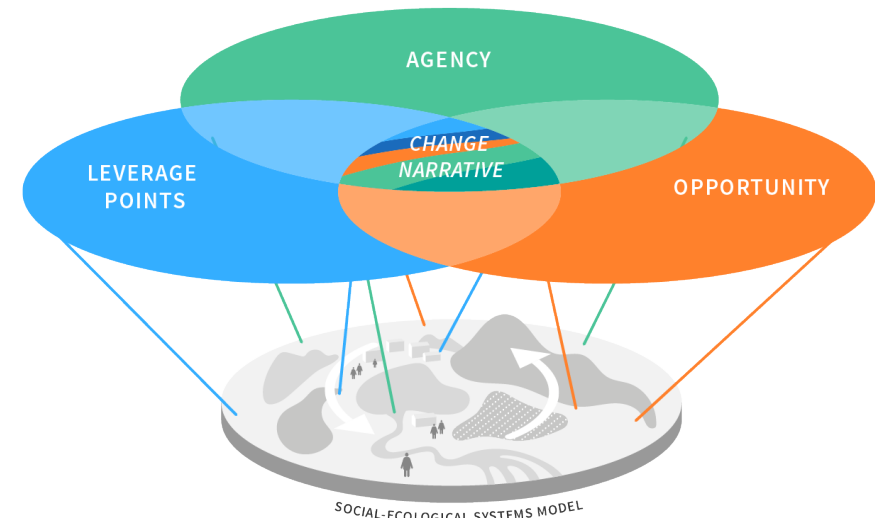
Module B: Developing specific actions to address dilemmas and option space

Module C: Turning actions into strategies for change

Evaluation, reflection and sense making

INTRODUCTION

The task in Phase 4 is to design innovative strategies for change, with a focus on biosphere-based development approaches where people become active stewards of their own environment. Wayfinder's approach to designing change strategies builds on the Change Narrative. As illustrated below, we use the models of system dynamics developed in Phase 3, to identify actions that target leverage points, while taking into consideration where the agency exists to influence those leverage points, and the overall opportunity context for creating change. Through this process, the Change Narrative evolves into an Action Plan that is plausible and concrete enough to be implemented and tested in reality.



Wayfinder's approach to designing change strategies builds on the Change Narrative and draws heavily on the models of system dynamics developed in phase 3. Illustration: E.Wikander/Azote

Wayfinder emphasizes the importance of innovation and finding new ways to create change. We focus particularly on developing novel combinations of actions to help break entrenched patterns and to “re-wire” social-ecological interactions in ways that foster new development trajectories that enhance both the productive capacity of the biosphere

and improve human wellbeing. The table below summarizes a set of design criteria for innovative strategies that the work cards in this phase helps you consider.

From now on in the process, it is important to tap into networks where innovation occurs and new ideas are generated. You should ensure that key changemakers are deeply involved in the process as you work through the next 3 modules and later move into Phase 5.

PHASE CONTENT

Module A is about preparing yourself to come up with innovative and effective strategies for change. The first part here is to establish an open and creative mind-set, and the second part is to agree on and articulate a higher-level goal for the Wayfinder process. This goal should specify the level of system change you are aiming for, i.e. adaptation, adaptation while preparing for transformation, or transformation.

In Module B, you start developing specific actions by identifying leverage points and designing actions that specifically target these points. Next it is important to reflect on, and mobilize, the agency required for implementing the actions, while analyzing the overall opportunity context for creating the proposed change. This exercise will lead to modifications to the list of

possible actions for various reasons, such as lack of influence or because the system is not ready for that type of change yet. The remaining actions are then filtered through a set of criteria to ensure they are both feasible and effective. In the last part of this module, the “short-listed” actions are interrogated to identify any unintended consequences they may produce, and how they might influence long-term options in the system. This is an iterative work process, that may involve revisiting previous work cards to ensure that the actions you design meet all required design criteria and have a high likelihood of success.

In Module C, the actions are bundled into strategies that consider how the different actions need to be coordinated across scales and sequenced in time. Through this process the strategies are packaged together into an Action Plan that will be shared with all relevant stakeholders. Before moving to phase 5, where the strategies begin to be tested, it is important to reflect on the new Change Narrative.

OUTPUTS

Phase 4 will result in a strategic Action Plan for changing your system. This plan is a concrete manifestation of your evolving Change Narrative,

which by now should be plausible enough to be tested in reality.

DESIGN CRITERIA FOR INNOVATIVE CHANGE STRATEGIES

Target leverage points – The actions that you design should target leverage points, those critical locations in a system where a small change can induce a much larger change in system structure and function are the most effective for shifting systems towards more sustainable, safe and just configurations.

Target deeper rather than shallower leverage points

– Actions that target system contexts and worldviews are more powerful than those that target flows and local feedbacks. For example, changing how decisions are made about allocation of irrigation water will have more impact than changing the specific amount of irrigation water allocated.

Influence dynamics at multiple scales – Actions that create change in multiple scales are more powerful than actions that just target one specific level of the system. You can influence dynamics at multiple scales through coordinated and sequenced actions, or through actions that propagate and spread through the system.

Changemakers known and opportunity context

conducive – Carefully consider who has the agency to implement the actions you design. Make sure important change agents are known, and that the overall social and institutional context is conducive to change, for example align your actions with an upcoming change in a relevant policy.

Be feasible and effective – Only implement actions that have a reasonable chance of succeeding under current social, cultural, and ecological conditions. Only implement actions that you have reason to believe will be effective. Where the chance of success is unknown, implement trials or small-scale test to learn more before scaling out and up.

Maintain or increase the system option space

– Actions should not undermine the capacity to cope with future change, unexpected events and shocks, and they should not lock you in on any particular path. Preferably, your actions should contribute to strengthening key dimensions of option space.

Minimize unintended consequences

– All interventions in complex systems produce both

intended and unintended consequences. You must make sure that your actions do not cause harm and that they do not merely move the problem elsewhere.

Robust across multiple possible futures – Actions should be designed so that they are robust across the widest range of possible futures. For example, rather than investing in a particular water harvesting technology, a more robust strategy may be to build capacity among farmers to use a range of different water harvesting techniques.

MODULE A

PREPARING THE GROUND FOR INNOVATIVE SOLUTIONS

MODULE CONTENT

Work card 25: Establishing an open and innovative mind-set

Work card 26: Articulating a high-level goal for the
Wayfinder process

WORK CARD 25:

ESTABLISHING AN OPEN AND INNOVATIVE MIND-SET

Before moving to identify innovative solutions for dealing with the identified dilemmas, it is useful to spend some time sharpening your creative thinking skills. There are many techniques for this and this work card suggests how to deliberately reframe challenges in order to surface new insights and potential solutions.

REFRAMING TO AVOID entrainment

By now you should have a fairly good idea about how the system works, and it is likely that your initial thinking on the key issues and challenges has changed substantially. Still, the dilemmas are well-known and there are often established ways of thinking about them. This can lead to ‘entrainment’ and getting stuck in old ways of reasoning and doing, which may inhibit thinking creatively about solutions. Reframing the

challenges can surface new insights and re-energize people to address the challenges differently.



Apartment buildings in Hong Kong, China, seen laying on the ground. Before you start identifying innovative solutions for dealing with the dilemmas, it is useful to sharpen your creative thinking skills. Reframing and changing perspectives, is one of the multiple techniques that can be used to stimulate creative thinking. Photo: iStock.

For example, it is easy to focus on overgrazing as strictly a technical management problem, but it may be useful to reframe it as a social problem where overgrazing leads to off-site impacts that affect the wider community. As a social-ecological problem, you may identify different interventions than those identified from a technical perspective, and you may engage with different people to solve the problem. The

attached case from the Kristianstad biosphere reserve in Southern Sweden, describes how reframing the area's identity from 'water sick' to 'water rich' opened up an entire range of new solutions.

CHALLENGING ASSUMPTIONS

Another reframing technique involves challenging the assumptions that you are making about a problem. For example, in a rural area that suffers from out-migration of young people, you might assume that a key driver is a lack of employment opportunities. But what if the main driver has more to do with not wanting to be seen as old-fashioned and getting left behind. Solutions to the problem (out-migration) require different strategies depending on which assumptions are most in line with reality.

Challenging assumptions and reframing can be powerful tools for bringing new perspectives to persistent problems. Before moving into Module B of this phase, where it will be very useful to have an open mind and to think creatively, we recommend that you reflect on alternative framings and underlying assumptions for each of the dilemmas in your system. Box 25.1 lists a few techniques that can be used to stimulate creative thinking and identify innovative solutions.

[Click here](#) to learn more about *innovation* and *scaling* of innovations by Per Olsson, Researcher at the Stockholm Resilience Centre and Michelle-Lee Moore, Deputy Director, GRAID programme at the Stockholm Resilience Centre

BOX 25.1 – IDENTIFYING INNOVATIVE SOLUTIONS

We are often 'trapped' by our own thinking style and experience or by the constraints of our organization or context (our organization only does x type of work, so that is the type of intervention we are focused on). Many deeply entrenched problems facing communities in developing contexts require among other things, creative thinking. Below are some tips for identifying innovative solutions.

Get specific – Use the work done in Phases 1-3 to ensure you are asking the right questions.

Learn fast -Look for novel solutions in other systems where similar problems have been solved. Can you "test" the solution's suitability for your context?

Break patterns – It is unlikely that more of the same types of interventions just done slightly better will result in a substantial change in your system, consider new and different types of interventions.

Positive deviance – Is there an example within the system where something is going against the trend? For example, maybe one farmer is producing substantially more grain than other farmers, or perhaps someone has developed a new market for their product that has never previously existed. What can you learn from these surprising situations?

Observe the issue in action – Rather than making a lot of assumptions, can you observe the issue in action? Sometimes by observing the issue in action you can discover new insights. Consider spending time with those most impacted by the issue, what are their insights about managing the issue?

Design in partnership – Design interventions in partnership with stakeholders, drawing on the knowledge and experience of those who will be implementing the intervention.

Challenge entrenched patterns of thinking – include people from outside the topic area or region to bring in new perspectives and ideas and to question your thinking. Don't be constrained by current norms or resourcing, identify potential interventions first, then vet them for practical constraints.

Multiple ideas – Ask people for 3-5 options to address an issue, rather than just one, this forces them to be very creative and engage more deeply with the task.

Crowdsource ideas – Can you use an online community to generate innovative interventions?

Organize a TLab – Get an innovative group of people together in a facilitated process, specifically designed to come up with “prototypes” that could solve your problem.

WORK CARD 26:

ARTICULATING A HIGH-LEVEL GOAL FOR THE WAYFINDER PROCESS

To be able to come up with innovative solutions to the problems at hand, it is important that everyone involved in the Wayfinder process agree on the goals of the process, especially since these might have changed along the way. This work card guides

you to articulate a clear goal that brings together people's aspirations, the required level of change, and some expression of the dilemmas being addressed.

REVISITING THE CHANGE NARRATIVE

Before developing specific solutions, it is important that stakeholders agree on the goals of the Wayfinder process, especially since these might have changed along the way. A useful way to start this process is to revisit the initial Change Narrative developed by the Coaliton in phase 1 and by a larger group of stakeholders in Phase 2. Given what you now know about the system dynamics, trends in option space, and future trajectories, is the initial Change Narrative, still relevant, or has something new emerged that makes you think differently about the aspirations, the dilemmas, the potential solutions to these, or the role of your Wayfinder process in creating change towards sustainability? See also attached discussion guide.

REFLECTING ON THE REQUIRED LEVEL OF CHANGE

With this discussion fresh in mind, use the decision tree below (figure 26.1 and attached activity sheet) to

structure a dialogue with stakeholders about the level of change that will be required to move your system towards a sustainable, safe and just future.



Men talking outside a riverside house in a rural area outside Bangkok, Thailand. At this stage in the Wayfinder process it is important to articulate and agree on a high-level goal. This goal should bring together the type of change required to solve the dilemmas and people's aspirations. Will moving towards the aspirations of these men require adaptive or transformative change? Photo: iStock.

Does the current system meet the aspirations of most stakeholders most of the time? Is the system on a sustainable trajectory? If the current system does meet most stakeholder aspirations most of the time, and the trajectory is deemed sustainable, working through the decision tree should lead towards a goal

of *Persistence* i.e., maintaining the current system as is. Given the general challenges of the Anthropocene, this is an unlikely outcome. It is more likely a system will fail to meet people's aspirations, or at least not do so in a sustainable way. Working through the decision tree will then direct you towards: *Adaptation*, Adaptation while preparing for Transformation, or Transformation. As you work through the decision tree document the assumptions and reasoning for your responses as they will be important later on.

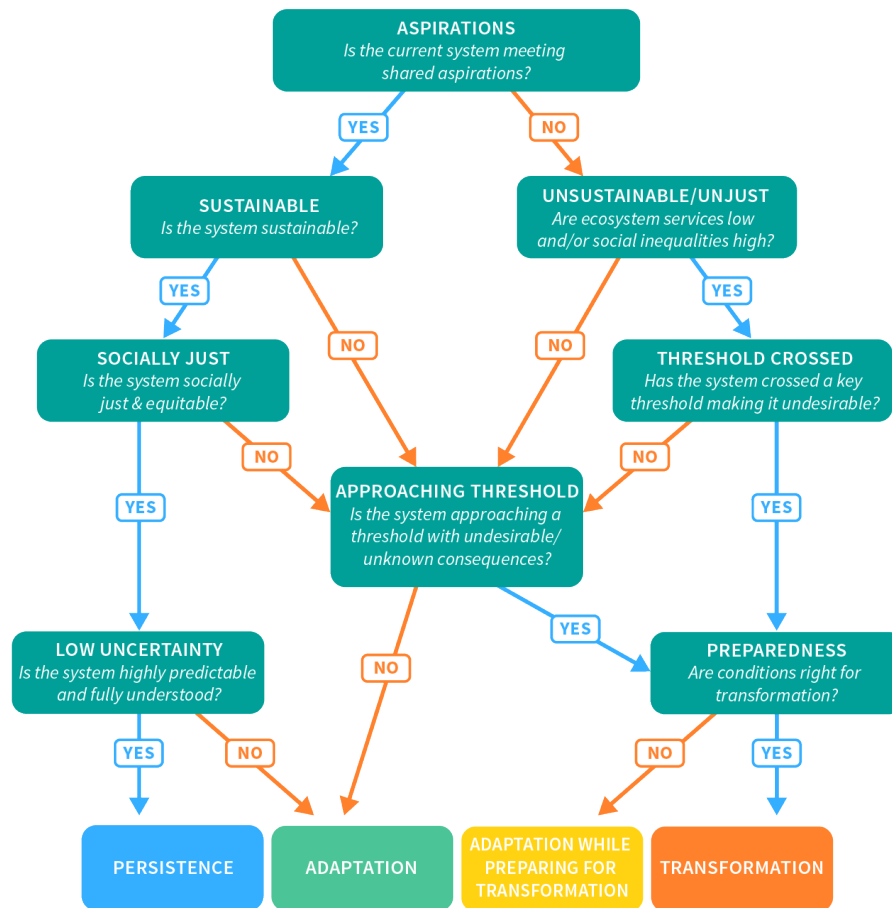


Figure 26.1. The decision-tree can be used as a starting point for discussing the higher-level goal for the system. Depending on aspirations and sustainability challenges, you will be guided toward one of four approaches to dealing with change. Illustration: E.Wikander/Azote

ARTICULATING THE GOAL OF THE WAYFINDER PROCESS

Articulating a high-level goal for the Wayfinder process brings together people's aspirations with the type of change (adaptation, transformation, etc.), and some expression of the dilemmas being addressed. It is important that key stakeholders are part of the discussion about the high-level goal, as this goal will determine the level of commitment and resources required. Don't worry about the exact wording of your goal, it can be refined later. At this stage it is enough to capture the intent of what stakeholders in the system want to achieve and why. Box 26.1 provides a few examples of how these goals can be formulated. Box 26.2 helps you to evaluate if you have settled on the right goal for your system.

BOX 26.1 – EXAMPLES OF HIGHER LEVEL GOALS

'To improve the resilience of food production systems to reduce childhood malnutrition, by adapting local farming system to declining rainfall and reduced labour'.

'To transform livelihood options to address persistent poverty and improve human well being by developing sustainable tourism Deep Green Wetland System'.

BOX 26.2 – CRITERIA FOR EVALUATING IF YOU HAVE SETTLED ON THE RIGHT HIGH-LEVEL GOAL

Persistence

Rationale: Your goal is to maintain the current system and the delivery and distribution of the current suite of ecosystem services in the face of known drivers for change. The aspirations and needs of most stakeholders are being met most of the time, the option space is stable and the trajectory is sustainable. Uncertainty is low.

Appropriate action: Action strategies will be orientated towards maintaining the current dynamics, structure, function, values and benefits of the current system, which is fair, just and sustainable over the long-term.

Adaptation

Rationale: Your goal is to make incremental change to your system because it is failing to deliver some of the aspirations to some of the stakeholders some of the time. The system is not moving towards known limits or thresholds. Option space is relatively stable, and problematic dimensions are known. You deal with predominantly known drivers and shocks.

Appropriate action: Action strategies will be oriented towards adapting current system dynamics. There may be some uncertainty about critical dynamics, but other issues are well known and understood and you have reasonable control or influence over key dynamics, which can be targeted by deliberate action.

Transformation

Rationale: Your goal is to deliberately transform parts or all of the current system to break out of a lock-in trap, and shift to a substantially different trajectory to avoid crossing critical thresholds in the near future. Option space is declining. The aspirations of the majority of stakeholders are not met, the system is unsustainable and unjust for many stakeholders.

Appropriate action: Action strategies will be orientated towards transformation by destabilizing any reinforcing feedbacks, and breaking existing patterns, processes and structure. This will involve deep changes within the system, which may take considerable time, effort and resources. Even if change is needed, this level of change will likely create resistance within the system. Uncertainty is high about the outcome of the transformation process.

MODULE B

DEVELOPING SPECIFIC ACTIONS TO ADDRESS DILEMMAS AND OPTION SPACE

MODULE CONTENT

Work card 27: Identify actions that target leverage points

Work card 28: Analyzing agency and opportunity context

Work card 29: Filtering your actions: feasibility & effectiveness

Work card 30: Considering unintended consequences, uncertainty, and option space

WORK CARD 27:

IDENTIFY ACTIONS THAT TARGET LEVERAGE POINTS

To design effective strategies for change, you first need to identify leverage points for systemic change and then tailor actions that specifically target these points so as to change the system dynamics around them. This work card describes how to identify where to intervene in a system and how to design actions that will move the system towards your goal.

I IDENTIFYING WHERE TO INTERVENE

The first task here is to identify *where* to intervene in the system. *Leverage points are places in the system where a small intervention can have a large impact on the system's behavior* (figure 27.1). Outputs from Phase 3 such as influence diagrams, causal loop diagrams, behavior over time graphs, and descriptions of system dynamics, thresholds, traps, and cross-scale

interactions etc. offer the clues to identifying leverage points.



Turning the lever. A leverage point is a place in the system dynamics whereby a small intervention gets a catalytic effect. To design effective strategies for change, you first need to identify where the levers are and then tailor actions that specifically target these points. Photo: iStock.

First consult your system models and look at key nodes and links in the system that have lots of interaction with other part of the system. Distill the model down so that it only includes the most critical components and dynamics. Look at key system feedbacks that influence how the system behaves as well as controlling or slow changing variables. Is the system locked-in by reinforcing feedbacks? For example, a coastal fishery that is experiencing steep declines in fish populations

might zero in on high fishing pressure and the lack of off-limit areas that provide refuge to fish, leading some communities to consider establishing no-take areas. Alternatively, to address these dynamics, some communities might seek to diversify their livelihood options by re-envisioning their community as one supported by both fisheries and tourism.

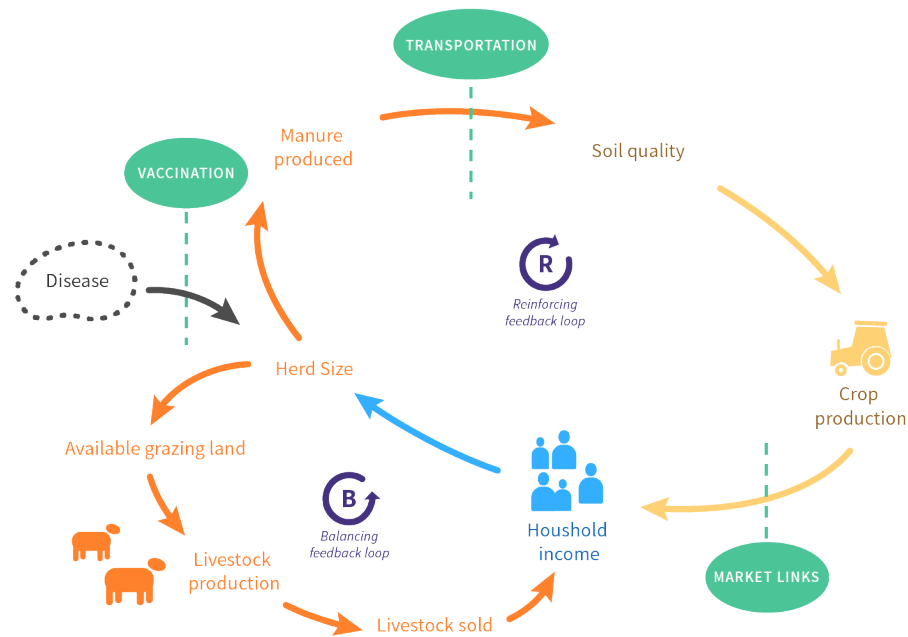


Figure 27.1. Interventions in the system should target leverage points (green), which are key relationships in a social-ecological system, where by a smaller change can have substantial impact due to the change in system dynamics. Illustration: E.Wikander/Azote

DIFFERENT KINDS OF LEVERAGE POINTS

It is important to realize that not all leverage points are equal. Figure 27.2 shows how *ease of implementation*, the *potential for system change*, and the *speed of system change* varies along a gradient of different types of leverage points, which can be conceptualized as ranging from flows, to feedbacks, to contexts to world views. For example, in an intensive agricultural system, lowering the levels of chemical pesticides applied is essentially changing a flow, whereas a more profound change in land management that would eliminate the need for pesticides would reflect a change in system feedbacks. Changing the contexts for this type of intensive agriculture, could for example be done by changing how EU's Common Agricultural Policy works, and changing world views could reflect a more far-reaching change of public opinion relating to organic versus non-organic produce. Changing values and world views is considered to be the most powerful type of leverage point, but also the most difficult to influence. When compiling your initial list of actions, think about ways of striking a balance with easier and more challenging levers. See attached activity sheet.

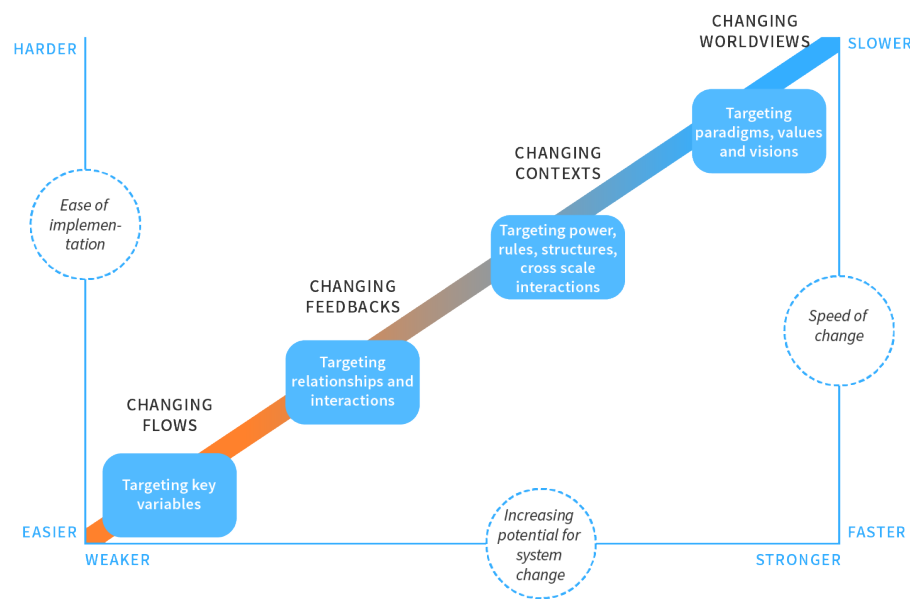


Figure 27.2. Different types of leverage points have different potential for system change, but generally also different ease of implementation and speed of change.

IDENTIFYING WHAT TO DO

Once you have identified where to intervene in the system, the next issue is what to do. First brainstorm around possible actions that target the leverage points and move the system towards your goal. It may also be useful to think about actions that help the system avoid undesirable futures (consult scenarios). You should

think of actions broadly. They could include a range of different things, for example changes in 1) technology and management practices, 2) formal institutions, such as laws or regulatory frameworks, 3) economic incentives, such as subsidies or taxes, 4) networks and connections, e.g. diffusion of new technology or information access, or 5) awareness levels, education, behavior, values, and norms.

Keep in mind you are trying to target specific points in the system. Therefore, generic actions such as ‘working with local municipal staff’ or ‘building capacity’ are not sufficiently detailed. At this stage, the more detailed you can be, the better. See the attached case from the Snowy River wetland system in Australia, where they designed actions that specifically targeted tipping points.

DOCUMENT EVIDENCE AND ASSUMPTIONS AS YOU COMPILE YOUR LIST OF ACTIONS

Upon compiling your initial list of actions that target the leverage points, ask yourself why you think these will work? It is important to document the evidence and assumptions regarding how these actions might change the system. This information will form the basis for the learning-by-doing approach to implementation that is developed in Phase 5. If you

cannot clearly explain why you think your actions will work, you may not have a clear enough understanding of how the system works. In that case, you should revisit previous steps to gain this understanding before proceeding. The attached discussion guide helps you structure the work on actions that target leverage points in the system.

WORK CARD 28:

ANALYZING AGENCY AND OPPORTUNITY CONTEXT

Now that you know where in the system to intervene and what needs to be done, it is time to consider issues related to who needs to be involved and how. This work card zooms in on agency and opportunity context. This refers to who has the ability to implement your actions under current conditions, considering the overall social and institutional context, in which the system and its actors are embedded.

WHO HAS AGENCY IN YOUR SYSTEM?

Some of the issues we bring up here have most likely already appeared in your discussion around actions, because issues around what to do and who to involve and how to do things given the general state of affairs are of course closely related. This section will guide you to think more deeply about who has the agency to implement the actions that you have designed and what the overall opportunity context looks like right now for achieving that type of change.



A demonstration for good governance at the World Social Forum, in Kenya, 2007. Having identified possible leverage points, it is important to reflect on the agency required to influence those points, and the overall opportunity context, in terms of existing social norms, governance arrangements etc, for creating the envisaged change. Photo: R. Kautsky/Azote.

Agency describes which individuals or groups have the ability (i.e., influence, knowledge, power, connections, etc.) to implement the actions. For example, if your dilemma concerns the negative effects of intensive, large-scale, mono-cultures of cereal crops, you might design a range of actions to support more small-scale, and organic agriculture. One action could be to provide financial credits to small agricultural enterprises with a clear sustainability profile. This would require the involvement of financial services providers, and you can think about agency here in terms of who would be the banks or other institutions that might be interested in partnering with you around this action. Another action might be to influence consumer behavior towards buying more organic produce. In that case you might think about agency in terms of government actors concerned with health and environmental protection, who are able to launch large-scale campaigns for shifting public opinion.

Analyzing agency requires a good understanding of human capacity, power issues, social structures, and existing social networks. There might be people in your system particularly skilled at enabling change, so-called changemakers. It is important to identify these change makers and reflect on how they are positioned in relation to the formal decision making structures

that are relevant to the system dilemmas. Are they part of the establishment, or operating more in the margins of the system, working to do things differently? It is also important to reflect on your sphere of influence in the coalition. To what extent are coalition members connected to existing changemakers across sectors and scales? How could these actors be involved in the process (if they are not already) to enable the actions to be implemented?

WHAT IS THE OPPORTUNITY CONTEXT?

In addition to understanding agency you also need to know something about the overall opportunity context. This refers to the larger social, political, and institutional setting in which the system and actors are embedded. The opportunity context includes existing formal institutions, such as laws, policies and organizational structures, as well as social norms, values and cultural practices, that depending on the situation, can facilitate specific actions or hinder them. Thus, the opportunity context might be more or less conducive to the type of change you want to create. Continuing with the simplified example above, as long as environmental regulations allow for the intensive use of fertilizer and pesticides, and people who can afford organic produce choose not to buy it, it will be

more difficult to increase small-scale organic agriculture.

HOW AGENCY AND OPPORTUNITY INTERACT

Opportunity context changes over time, in response to multiple factors including individual agency.

Therefore, the prospects for successfully implementing your actions will also change over time. For example, trying to introduce an innovative approach when the system is stable and institutionally rigid is unlikely to succeed. At another point in time, when the system is more flexible, for instance during a period of political or social change, there is a greater opportunity to introduce new and innovative approaches.

Understanding how existing institutional structures may hamper change is important to prepare for the implementation of your actions. Equally important, however, is understanding how changemakers can use their skills to modify existing institutional structures, e.g. by addressing deep leverage points such as values, to make the system more open to the type of change they want to see (figure 28.1). The attached case from the Great Bear rainforest in Canada illustrates how the opportunity context may change over time, and what

that means for changemakers trying to influence the system's development.

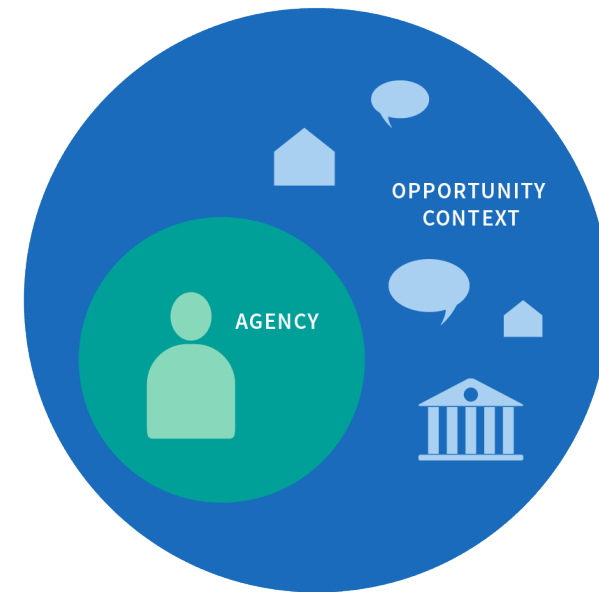


Figure 28.1 Changemakers are situated in a wider social and institutional context that is more or less conducive to change. Critically assessing how agency and opportunities interact helps to identify strategic actions and increase impact. Illustration: E.Wikander/Azote

[Click here](#) to learn more about searching for opportunity with Per Olsson, Researcher at the Stockholm Resilience Centre

Analyzing agency and opportunity context in relation to your list of actions

Analyzing agency and opportunity context is not an exact science. Looking at the list of actions that you have identified, draw on the work that you did in Phase 2, [work cards 13-17](#) relating to key actors, social networks, decision making structures, and the institutional set-up of your system, and the work you did in Phase 3, [work cards 20-24](#) on cycles of change, option space and future scenarios, to reflect on agency and opportunity context. It could be useful to ‘map’ your observations about agency onto the systems diagram, and your thinking about the opportunity context to an adaptive cycle diagram. Doing so may reveal some new insights about the viability of your actions. The attached discussion guide will also help structure your thinking.

If this exercise leads you to believe that change through a specific action is not very likely at this time, you will have to think about how the opportunity context can be modified to increase its potential in the future. For example, is there a way to nurture promising biosphere-based innovations at a small-scale until there is a better opportunity to implement them at wider scales? Alternatively, is there a way to support networks of changemakers and future leaders that

advocate for this type of action? Are there marginalized groups that need to be empowered before this type of change is likely? This could include for example training and capacity building or creating a new governance structure that increases local participation in decision making. Or could you work on deep leverage points such as values, that over time would increase the chances for success of your actions? Obviously, this is a far more challenging approach, but it may be the best choice to create change given the current context. This will lead you to develop a new set of actions. Creating change will always be an interplay between leverage points, agency and opportunity and will involve multiple actions at different scales, that need to be strategically coordinated.

WORK CARD 29:

FILTERING YOUR ACTIONS: FEASIBILITY & EFFECTIVENESS

Filtering your actions through a set of relevant criteria will refine your list of potential system interventions so that it includes only those that are both socially, economically, and environmentally sound and have the potential to move your system towards your goal. This work card suggests a set of filtering questions for feasibility and effectiveness.

FEASIBILITY

By now you have a list of actions that target leverage points, and that are designed in a way that considers agency and opportunity context. Before moving further it is important to reflect on the feasibility and effectiveness of your actions.



Farmer sifting grain after harvest, Spain. Filtering your actions through a set of criteria that considers feasibility and effectiveness will help you refine your list of interventions. Photo: iStock.

Feasibility reflects a set of important social, cultural, emotional, religious, technical, economical, and environmental issues and potential barriers to a specific action, which might seem evident but are often not taken seriously enough.

One well-known example is the distribution of solar panel cookers in poor rural areas in the South, which often have not been used simply because it is far too hot to cook outside. Another is the many dam projects that have failed once the funder has left, since not enough resources have been invested in capacity building for continued dam maintenance and

supporting of governance arrangements around the dam. A third example is the assumption that moving a highly productive breed of livestock from one region to another would be a successful strategy, only to realize that the livestock were not adapted to the new climate and the environmental conditions, and consequently had a very low resistance to some local disease.

EFFECTIVENESS

Effectiveness reflects how powerful a particular action will be in creating the desired change. Silver bullet approaches are unlikely to be successful for creating change in complex systems. Instead, dealing with the dilemmas you face will most likely require a combination of different actions that target different types of leverage points at different scales. These actions need to be implemented in a coordinated way so that they work to support each other.

For example, shifting to ecosystem-based management of the Great Barrier Reef involved a number of actions targeting different levels of governance in a coordinated manner. From raising local community support through a consultation campaign, to establishing the largest no-take zone in the world, to backing policy with good science and transitioning to more flexible and adaptive ways of managing the reef.

Another example is rainwater harvesting in northern Tanzania, which in order to yield the expected benefits for local farmers often has to be combined with improved capacity for storing surplus yield in households, and with better market connections, so that the surplus can be stored and sold later at external markets, when crop prices at local markets drop due to over production.

FILTERING YOUR ACTIONS FOR FEASIBILITY AND EFFECTIVENESS

Filtering your actions to make sure they are socially, technically, environmentally and economically feasible, and to make sure that they will be effective in creating the desired change, will help you avoid wasting resources on things that will not work anyway. The attached discussion guide will help you think through important aspects related to the feasibility and effectiveness of your actions.

WORK CARD 30:

CONSIDERING UNINTENDED CONSEQUENCES, UNCERTAINTY, AND OPTION SPACE

Once you have identified where to intervene in a system, what to do and how to do it, and filtered your actions for feasibility and effectiveness, the last step in vetting your actions is to consider any unintended consequences they may have, how they would fair in an uncertain future, and how they would influence the system's option space. This work card describes how to deal with these important issues, which all are essential features of resilience thinking.

TRYING TO FORESEE UNINTENDED CONSEQUENCES

This work card is central to the Wayfinder process. Dealing with unintended consequences, uncertainty and option space are issues at the core of resilience thinking. Looking at your actions through this lens is often considered costly and generally perceived as being of lower priority than addressing the immediate dilemmas. However, deeply engaging with these issues is the only way to navigate towards a more sustainable, safe and just future in the Anthropocene.

All interventions will lead to both intended and unintended changes in the focal system, and potentially beyond. Therefore, it is of utmost importance to consider what unintended consequences the actions that you have designed might have. It is critical to make sure that actions you will implement as a result of the Wayfinder process do not cause unintended harm, particularly to the safety and wellbeing of vulnerable people in the system or beyond. You also must make sure that your solutions do not only move the problem elsewhere or transfer the burden to other people.



Rusty ship in the former Aral Sea harbor of Moynaq, Uzbekistan. One the world's fourth largest lake, the Aral Sea has now dried up almost entirely, as a consequence of large-scale irrigation diverting the inflow of water, having disastrous social and ecological outcomes. The last step in vetting your actions is to carefully consider potential unintended consequences, uncertainty, and option space, and revise your actions accordingly.

DEALING WITH UNCERTAINTY

A second important issue to consider is robustness against an uncertain future. You may have designed a set of actions with a particular future in mind, hoping that future will materialize. However, in the Anthropocene change is the new normal, and even if you have spent time scanning the horizon for emerging drivers and trends and developing plausible scenarios that consider some of the change dynamics at play,

there are so many unknown factors. Therefore, it is essential that your actions are designed so that they are robust across a range of possible futures, in the sense that they will still function and contribute towards a more sustainable development trajectory. Otherwise there is a large risk that the work you do here is done in vain.

MANAGING OPTION SPACE

A third key issue that needs to be considered here, are the effects on option space. Refer back to your option space analysis in phase 3 and think about the key dimensions and the most significant trends. In order to avoid new lock-ins and make sure you maintain as much adaptive and transformative capacity over time as possible, it is crucial that the actions you have identified do not further undermine key dimensions of the option space. Neglecting this aspect means that you run a substantial risk of solving one problem now only to be faced with a new and much worse problem further down the line.

REVISING AND REFINING YOUR ACTIONS

By now you have a list of actions, which considers leverage points, agency, opportunity, feasibility and effectiveness. The last revision of this list, before you

are ready to move into strategy and implementation, should consider unintended consequences, uncertainty and option space.

Revisit [work card 2](#), about principles for good Wayfinder practice, and use outputs from [work cards 2, 15, 18, 19, 22, 24](#), and [27-29](#) to look for unintended consequences that might arise from the actions. Look particularly for changes in feedbacks, and second or third level connections that could be influenced. If these risks for unintended consequences cannot be lowered or managed, and if there is nothing you can do about robustness and option space, you should consider not proceeding with the action. Having said that, change will not happen if the actions that you design do not challenge some of the entrenched patterns. Therefore, there will always be a level of risk associated with what you do. However, it is important to work with your coalition to determine the level of acceptable risk and to ensure accountability for what comes out of the Wayfinder process. Use the attached discussion guide to try to foresee unintended consequences, increase the robustness of your actions to an uncertain future and manage option space in your system.

Having done that you should be able to come up with a refined list of actions that target leverage points for

systemic change, that consider agency and opportunity context, that are feasible and effective, and that handle unintended consequences, uncertainty and option space in a satisfying way. If that is the case, you are ready to move on to Module C, where the individual actions are bundled into strategies and packaged into an Action Plan. Use the attached activity sheet on design criteria to check that you are good to go. If you feel that you have not dealt with all the design criteria adequately, we strongly recommend that you revisit earlier parts of Phase 4, to come up with alternative actions, or to design your actions in a different way.

MODULE C

TURNING ACTIONS INTO STRATEGIES FOR CHANGE

MODULE CONTENT

Work card 31: Strategizing

Work card 32: Packaging and communicating the Action Plan

Work card 33: Reflecting on the new change narrative

WORK CARD 31:

STRATEGIZING

A first step towards creating an Action Plan is to bundle together the separate actions that you have developed into a set of innovative strategies for change. This requires that actions are sequenced appropriately and coordinated across scales so that they support each other. This work card describes how you can turn separate actions into strategies for change.

BUNDLING YOUR ACTIONS TOGETHER

By now you have a list of separate actions that will contribute towards adaptive or transformative system change. Before these actions can be implemented and tested in reality they should be bundled together into coherent strategies. How actions should be bundled will depend on a range of factors and therefore will vary depending on the context. Strategies could for example be formulated along program lines, or funding priorities, but they may also relate to geographic areas,

to the scale of operations, or to the type of leverage point that you are targeting.



Before your actions for change can be implemented and tested in reality they should be bundled together into coherent strategies.
Photo: iStock.

It is up to you to decide the best way to bundle your actions into strategies for change, but issues important to consider when strategizing include how to create the most powerful combination of the minimum actions, and how different actions should be sequenced in time and coordinated across scales. For example, for a new fishery practice to become adopted you might need to build awareness around the negative effects of the old practice, and to change current incentive structures before it makes sense to promote the new and more

innovative practice. Use the attached discussion guide to help you formulate appropriate strategies for change. Revisit the high-level goal articulated in work card 26 to make sure your strategies align with that.

WORK CARD 32:

PACKAGING AND COMMUNICATING THE ACTION PLAN

When you have your strategies for change in order they should be packaged into an Action Plan, which in turn should be widely communicated to all stakeholders involved in or implicated by the Wayfinder process. This work card lists a few important questions to think through in order to produce the best Action Plan you possibly can.

FROM STRATEGIES FOR CHANGE TO A CONCRETE PLAN

Towards the end of phase 4 it is important to summarize the results of your Wayfinder journey thus

far into a concrete Action Plan that can be tested in reality. This plan should include a clear statement of the high-level goal for the Wayfinder process that you have agreed on and detail the strategies for change that you have designed to move towards this goal.



When you have your strategies in order they should be packaged into an Action Plan. At this point, communicating well is important, since implementation of this plan requires active involvement of a broad range of stakeholders in the system. Photo: iStock.

The Action Plan should be widely communicated so that all stakeholders involved in the Wayfinder process, and also people not directly involved but who would be affected by the actions, are aware of what is being planned. Communicating well is essential at this point in the process, since implementation of this plan

requires the active involvement of a broad range of stakeholders in the system.

How best to package and communicate the plan to the relevant stakeholders will of course depend on a range of factors. Important issues to consider include what the best format for the plan will be, how to get widespread support for it, and how to make sure it is updated over time as new knowledge emerges.

The attached discussion guide points to some important questions for the Coalition to reflect on when creating your Action Plan. Box 32.1 contains some criteria which allow you to stress test your Action Plan, make sure that it will be able to deal both with shocks and emerging opportunities.

BOX 32.1 STRESS TESTING THE ACTION PLAN

Dealing with a major shock

- What will you do if you experience a major shock to the system such as a drought, flood or political change or conflict?
- Are there parts of the Action Plan that you could or could not implement if that was the case? How would that impact the process?
- Could you still achieve the intended outcomes if parts of the Action Plan could not be implemented?

- What types of shocks would be more or less disruptive?
- Would the different types of shocks create opportunities for change? How?

Dealing with an opportunity

- If a major opportunity should arise, such as increased funding or political support, could you implement your Action Plan quickly? How would you scale out, and how would you embed your strategies for change in the wider system?
- What would be required for you to take advantage of such an opportunity?
- Which elements of the Action Plan do you believe have the most likelihood of success? Why? Can you replicate or scale the success factors?