Define

The journey of applied behavioural science begins here.

Before jumping into conducting research or designing solutions, it's essential to step back and define what success looks like.

This involves answering questions such as:

- What is the problem we're solving?
- What is the outcome we want to achieve?
- What is the specific behaviour that we want to see change?
- What is the system we are operating within?
- And finally, where are we best placed to make an impact?

Why *Define*?

Too often, teams jump straight to designing or implementing solutions without a shared understanding of the underlying issue. This could be due to resource constraints, tight deadlines, or lack of capacity, among other reasons. However, without a clear and shared problem definition, efforts risk being inefficient.

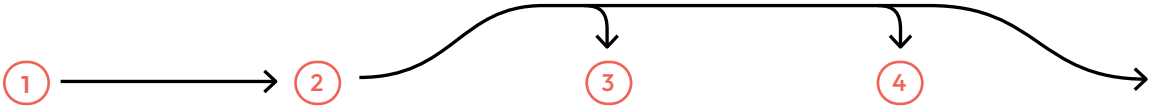
When faced with complex challenges in humanitarian and development work, it can be tempting to exclusively prioritize broad and systemic reforms. Change can also start with identifying and influencing specific behaviours. Breaking down overwhelming problems into concrete behavioural questions can reveal actionable solutions and deepen understanding of what drives change.

How can we *Define* the challenge?

In this first phase of the DEPTHS methodology, there are five steps to: build a shared understanding of the problem; identify a specific behaviour to change; and pinpoint leverage points to focus on. While most steps are essential to ensure a high-quality behavioural science project, others are optional. Optional steps will be noted.

Each step includes specific tools, guidance on why these tools matter, and how to use them. A **case study on increasing childhood vaccination uptake in Lebanon** will exemplify how the tools can be applied in practice.

Steps in the *Define* phase



1	2	3	4	5
Define the problem and outcomes	**Identify potential target behaviours**	**Map the system** (OPTIONAL)	**Find leverage** (OPTIONAL)	**Document the project and scope**
Specify the problem, outcome(s) of interest, and which stakeholders and population groups to engage.	With the problem and outcomes defined, identify the constituent behaviours. Select one that has the highest potential impact and feasibility of being changed	Create a graphic representation of the relationships between different factors in the system. Include both drivers and barriers to success in addressing the problem and achieving the desired outcome.	Use the system map to identify leverage points: aspects of a system that, if changed, would have a high impact on the desired outcomes.	All of the outputs of the *Define* phase will culminate in a one-page summary: the project canvas. This document outlines the intended outcome, leverage points, potential actors, and actions that will drive change, along with roles and responsibilities.
TOOLS:	**TOOLS:**	**TOOLS:**	**TOOLS:**	**TOOLS:**
Problem Definition and Outcome Statement Stakeholder and Audience Map	Behaviour Tree Impact-Feasibility Prioritization Matrix	System Map	Leverage Point Analysis	Project Canvas

The Define phase requires a committed team and adequate resources. Depending on the project's goals, it may also help to involve specialists in areas such as experts from the programme itself, social and behaviour change, human-centred design, or systems thinking.

Common pitfalls

There are common traps that can derail behaviourally-informed work. Throughout the *Define* phase, keep these possible issues in mind:

- **Rushing to solutions.** Jumping straight into solutions or interventions without considering all of the factors can lead to ineffective or misaligned programmes. For example, designing an app to help caregivers track their children's vaccination schedule might seem promising, but without first understanding how caregivers access information, what motivates follow-through, or whether they trust digital tools, the solution may fall flat. The best solutions often emerge after framing the problem and learning more about the context.
- **Failing to engage communities.** Defining the problem and identifying priorities without community engagement and participation can result in a mismatch between the project's focus and what matters to those who are directly affected. For example, an immunization programme might prioritize building more fixed-site clinics to improve access, assuming proximity is the main barrier. However, if communities aren't consulted, the programme might overlook the reality that caregivers often fear mistreatment by health workers, or that household duties make clinic hours inaccessible. Community engagement isn't a checkbox; instead, it grounds applied behavioural science in real-world experience.
- **Blaming the individual.** Avoid framing problems as what people are doing "wrong." Focus instead on forces that shape behaviour: structural, cultural, or environmental barriers. For example, a campaign encouraging caregivers to vaccinate on time might start with 'negligence', yet caregivers may face long travel distances, missed wages, or waiting long hours at the clinic. Environmental factors like transport, socio-cultural drivers like family community and expectations, and psychological drivers such as trust in the health system all influence what people do or do not do.
- **Solving symptoms without focus.** Goals like 'increase contraception uptake' are too broad. Instead, focus on specific behavioural objectives (e.g., "increase consistent contraceptive use among adolescent girls in peri-urban areas"). This makes it easier to identify root causes, design tailored interventions, and measure progress.
- **Treating assumptions as facts.** Flag assumptions and treat them as hypotheses to test, not conclusions to act on. For example, introducing a financial penalty for parents who arrive late to pick up their children may seem like a logical deterrent. Yet this can backfire as parents may view the fine as a fee they're willing to pay, rather than a behaviour to avoid.
- **Ignoring power dynamics.** There is always a risk of reinforcing existing hierarchies or overlooking who actually holds influence over decisions. If formal and informal decision-makers are left out, solutions risk being ineffective. In nutrition programmes, focusing messaging solely on mothers may ignore the authority of husbands, grandmothers, or local leaders in shaping food choices.
- **Skipping documentation and alignment.** Without clearly documenting the behavioural focus, population of interest, scope, and open questions, teams risk misalignment, duplication of work and a lack of focus. D key decisions clearly to keep the team aligned, and provide a shared reference as the project evolves.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

Childhood vaccination is one of the most cost-effective public health interventions, yet many children, especially in low- and middle-income countries (LMICs), remain un- or under-vaccinated. In Lebanon, home to the world's highest per-capita refugee population, challenges to vaccination uptake are compounded by poverty, displacement and strained health systems. Although national immunization coverage once neared 90 per cent, outbreaks of measles and mumps in 2013 and 2015 revealed growing pockets of under-vaccination.

In response, the Ministry of Public Health and UNICEF launched the Accelerated Immunization Activities (AIA) programme to reach vulnerable children through both health centres and community outreach. Yet even with free services and education campaigns, under-vaccination was still high.

A multidisciplinary team from UNICEF, Nudge Lebanon, and the Ministry of Public Health (MoPH) set out to explore these challenges from a behavioural science perspective to define the issue Rather than focusing solely on structural or access barriers, they focused on caregiver decision-making and identified barriers such as long wait times, socio-cultural constraints, and trust in the health system.

The team grounded their work in real-world insights and set the stage for testing interventions by articulating the problem through the lens of caregiver decision-making.

Throughout this guide and starting with the Define phase, the Lebanon research team's journey will serve as a real-world example of how each phase of the DEPTHS process can help teams to effectively apply behavioural insights.

Note: *While this team did not explicitly use all the tools in the DEPTHS field guide, real project data has been used to illustrate and align their design process.*

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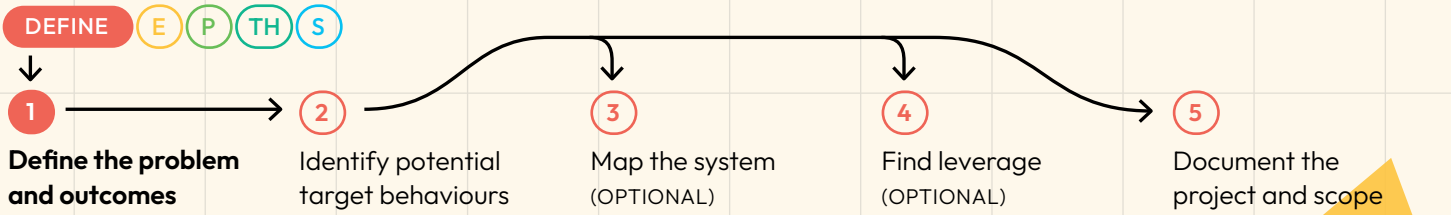


STEP 1:

Define the problem and outcomes

In this step:

This step guides teams to define the problem and write a SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) Outcome Statement. The outcome should be ambitious yet realistic, grounded in what matters to the people UNICEF serves, and feasible for the project team. A strong outcome statement defines the:

- Specific change to be achieved
- Target population for behaviour change
- Magnitude of the intended change
- Timeframe for the intended change

Associated tools:

- Outcome Statement
- Stakeholder and Audience Map

Why it matters:

A well-defined problem is more than just a topic or general concern, such as 'low immunization rates' – it's a specific, observable gap between how things are and the desired behaviour. Defining the problem means asking: Who is affected? What is going wrong? Why does it matter? What is the cost of inaction?

That's the role of an outcome or objective: a clear, tangible result that the project will work toward, within the time, scope, and resources available. This ensures outcomes remain grounded in measurable results for individuals, not just institutional priorities. A strong outcome statement clearly articulates the change the project is working toward. It prevents premature 'solutioning' and serves as a guiding anchor for every decision that follows.

This is also a good moment to check whether behavioural science is the right fit for your problem: Applied behavioural science helps most when people have capability, opportunity, and motivation to act, but still face barriers to follow-through.

How to do it:

1. Work with experts to pinpoint opportunities

Start by consulting colleagues or sector specialists. In most cases, persistent challenges have already been identified, whether they're a bottleneck in service delivery, a gap in uptake, or an issue that hasn't responded to existing approaches. Sector specialists and expert colleagues can help pinpoint where efforts have stalled and identify areas where a behavioural sciences approach could add the most value.

In the case of increasing childhood vaccination uptake in Lebanon, the problem was already being addressed by the Ministry of Health through the accelerated immunization activities (AIA) programme. However, specialists recognized that this effort alone was not enough to increase immunization rates.

Be wary of becoming too narrow in focus. Familiarity with a subject can lead to assumptions or blind spots about the wider system. While experts provide depth, their perspectives may be biased. That's why it is essential to validate assumptions with local stakeholders in the next steps, such as Step 2 later in this chapter: Identify potential target behaviours.

2. Articulate the problem

After gathering insight from both experts and local stakeholders, it's time to use the left side of the Problem Definition and Outcome Statement worksheet to clearly articulate the problem the project will address.

a. Questions 1–3 describe the problem: What's happening, where is it happening, and why does it matter? Use insights from both expert input and community perspectives.

b. Use data where possible to illustrate the size of the problem (e.g. prevalence, coverage rates, or service gaps)and to help anchor the issue in measurable terms.

c. Pause and reflect: Is this the right problem to focus on? Whose perspectives are being represented? What assumptions might we be making?

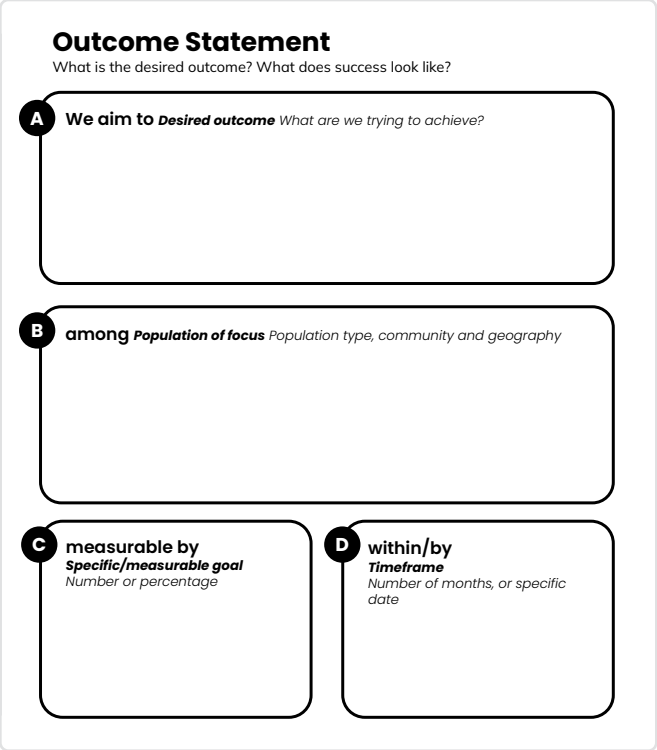
d. Finally, assess whether the problem is a good fit for a behavioural science approach by asking: Could changing decisions, behaviours, or the context in which they occur, lead to meaningful impact or desired outcomes?

In formulating the problem statement, make sure to:

- **Be specific about *who* is affected and *where*.** Avoid generic terms like 'community member' or 'young people' unless clearly defined. Instead, specify populations of interest — for example, "adolescent girls aged 10–19 living in rural areas".
- **Focus on observable gaps.** What is happening that shouldn't be, or what should be happening that isn't?
- **Describe an actual problem, not just the absence of an activity.** For example, 'low uptake of vaccines' is a problem. In contrast, 'lack of health worker training' or 'lack of incentives' are potential causes or contributing factors, but not problems themselves.
- **If possible, refer to existing data or evidence that supports the problem description.** This will lay the groundwork for a stronger diagnosis later.

3. Create the outcome statement

Move to the right-hand side of the Problem Definition and Outcome Statement to ask: What specifically are we trying to change by addressing this problem? The outcome statement should directly respond to the problem and reflect the measurable improvement if the project is successful.



Write a SMART goal:

- **Specific:** clearly defined
- **Measurable:** linked to observable changes
- **Achievable:** realistic for the project team and context
- **Relevant:** aligned with the scope and priorities
- **Time-Bound:** with a clear timeframe for change

Specifically, the following areas should be filled in: the desired outcome (the change or action the project is aiming to achieve), the population of focus (the population type, community, and geography), the specific and measurable goal (ideally expressed in numbers or percentages), and the timeframe (such as the number of months or a specific end date). The table on the following page provides examples of weak and strong outcome statements.

While crafting the outcome statement, keep these points in mind:

- **'Awareness' is not an outcome.** Focus on measurable, observable changes in the real world – metrics that can be tracked over time. For example, caregivers may already be aware of the importance of vaccines; this awareness doesn't guarantee that caregivers will follow through on appointments or complete their child's vaccination schedule on time.
- **The outcome should not yet include a specific behaviour.** Concentrate on defining the high-level result the project seeks to achieve. That said, if a potential target behaviour emerges during this part of the process, make a note of it. It may be useful to revisit, upon reaching 'Step 2: Identify potential target behaviours'. For example, if the goal is to increase timely childhood vaccination, the aim might be to support caregivers in making a plan for vaccination appointments, or health workers in following up with families more consistently. However, these behavioural aspects come later. Instead, the focus should be on articulating the broader outcome that the project is working towards.
- **Outcomes should describe the desired change, not the proposed solution to achieve it.** Before jumping ahead to specific interventions, fully explore the problem's context through the behavioural science process. Let the outcome guide thinking, not pre-empt it.
- **Outcomes should account for existing gender, socio-cultural, and power dynamics.** Pause to reflect: Are there differences in roles, norms or power dynamics that affect how different groups experience the problem we're addressing? Consider framing an outcome that not only tackles the core issue, but also helps reduce underlying inequities, whether based on gender, age, ethnicity, disability, or other forms of marginalization.

TABLE 1. WEAK VS STRONG OUTCOMES (SMART)

WEAK EXAMPLE	WHY IT'S WEAK	STRONG EXAMPLE
"Enhance school retention of adolescent girls."	It's not clear what "school retention" means in practice: are we talking about primary, secondary, or both? There's no specific location, age group, or timeframe, and "enhance" is too general to track progress.	Increase secondary school attendance and reduce dropout rates among adolescent girls in rural areas of [area name], measurable by a 20% reduction in dropout by grade 9, within 2 academic years.
"Increase vaccination rates in target areas."	Clear intent, but too broad: no baseline, no target %, no timeframe, no defined population (Which vaccine? Which age group?).	Improve routine childhood vaccination coverage among children under 2 in low-coverage districts of [area name], measurable by a 10 percentage point increase in full immunisation rates, within 12 months.
"Promote good nutrition practices amongst children."	Activity-framed rather than outcome-focused. "Promote" implies process, not result. Also doesn't clarify who or what success looks like.	Improve early identification and treatment of malnutrition among children under 5 in drought-affected regions, measurable by a 25% increase in admissions to community-based management of acute malnutrition services in [area name], within 9 months.

4. Map stakeholders and target audiences

The **Stakeholder and Audience Map** worksheet helps to clarify which individuals are most interested in or concerned by the problem, along with their influence. This tool helps to map these groups of people and consider which type of engagement will ensure future research and intervention efforts are well targeted.

Use the matrix in the **Stakeholder and Audience Map** worksheet to sort individuals and groups based on how much power they hold to shape the issue, and how actively involved or interested they are. Mapping stakeholders this way can help inform research recruitment, partnerships, and engagement strategies. It can also aid in choosing the most appropriate engagement strategy.

Place stakeholders on the matrix according to:

- **Influence:** To what degree can this stakeholder support or hinder the problem?
- **Involvement:** To what extent is this stakeholder interested in or concerned about the problem?

TABLE 2. STAKEHOLDER MAP CRITERIA AND ENGAGEMENT STRATEGIES

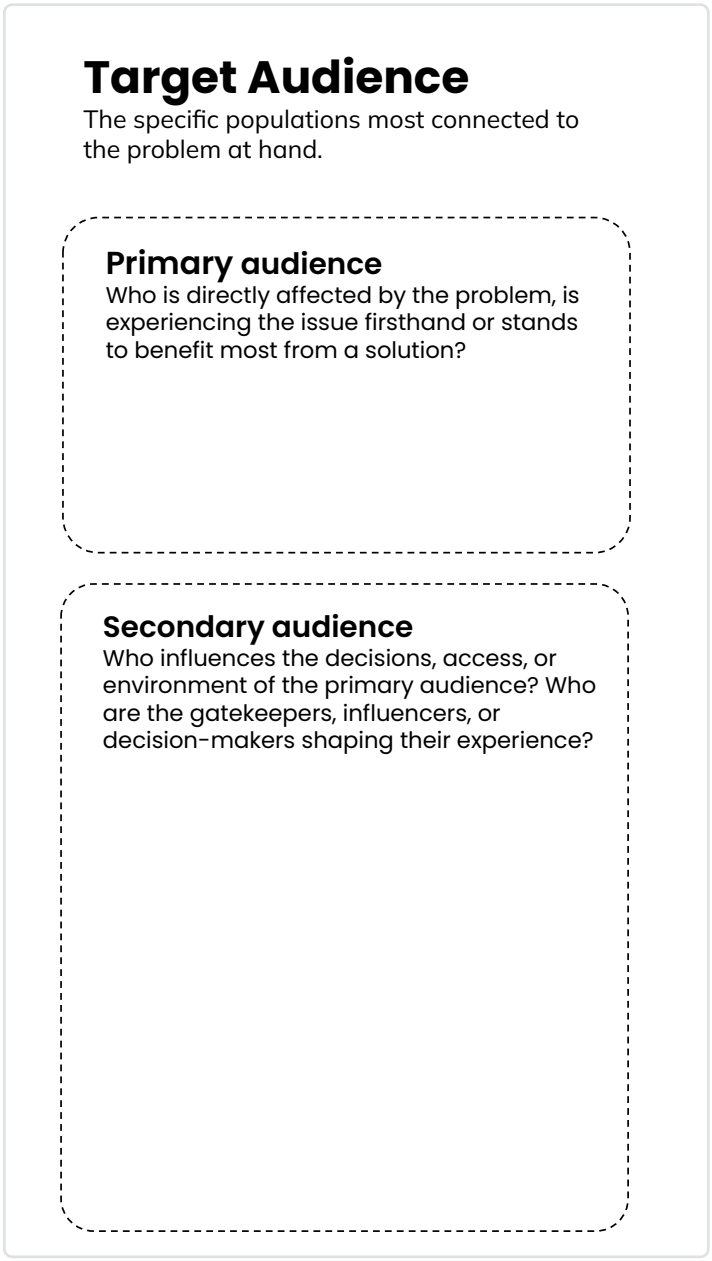
INFLUENCE	INVOLVEMENT	ENGAGEMENT STRATEGY
High	High	**Manage:** These stakeholders are both influential and highly invested in the issue. Prioritize active collaboration and manage their involvement closely. **Case example:** The technical project team in charge of increasing immunization rates within the Ministry of Health of Lebanon.
High	Low	**Satisfy:** These stakeholders are influential but less engaged. Keep them informed and find ways to maintain their support without overburdening them. **Case example:** High level public officials within the Ministry of Health of Lebanon.
Low	High	**Inform:** These groups are very interested but may have limited influence. Keep them updated and draw on their lived experience or technical insight to inform the work. **Case example:** Caregivers of young children, including both Lebanese and Syrian refugee families.
Low	Low	**Monitor:** These stakeholders are currently less relevant but may become more engaged over time. Stay aware of shifts in interest or influence. **Case example:** Local NGOs working on general child health or maternal care, but not currently involved in the immunization programme.

Use the second half of the Stakeholder and Audience Map worksheet to brainstorm and list target audiences:

- **Primary audiences:** Individuals or groups who experience the problem firsthand, who directly influence the targeted outcome through their actions, or who will most likely benefit from a solution. Examples include caregivers of children who need to get vaccinated, parents of children with malnutrition, adolescent girls at risk of school dropout, or residents of informal settlements with limited access to clean water.
- **Secondary audiences:** These might be individuals or groups who indirectly shape the target outcome through decisions, habits, or roles. They influence the environment, decisions, or access of the primary audience. This may include gatekeepers (e.g., community elders, religious leaders, or health facility managers), influencers (e.g., peers, family members, or teachers), and decision-makers (heads of households, community leaders, or authorities). Though they may not always be directly affected by the issue, their roles shape how primary audiences experience it. Their influence may be supportive or detrimental to the outcome.

When mapping out populations of interest:

- **Avoid over-generalising.** Using terms like 'caregivers' or 'women' can mask key differences within a group. Consider factors such as age, gender, marital status, geography, and socioeconomic background when segmenting audiences.
- **Look beyond the most visible actors.** The loudest or most visible groups aren't always the most impacted. Be intentional about surfacing marginalized voices who may experience the issue differently.



CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

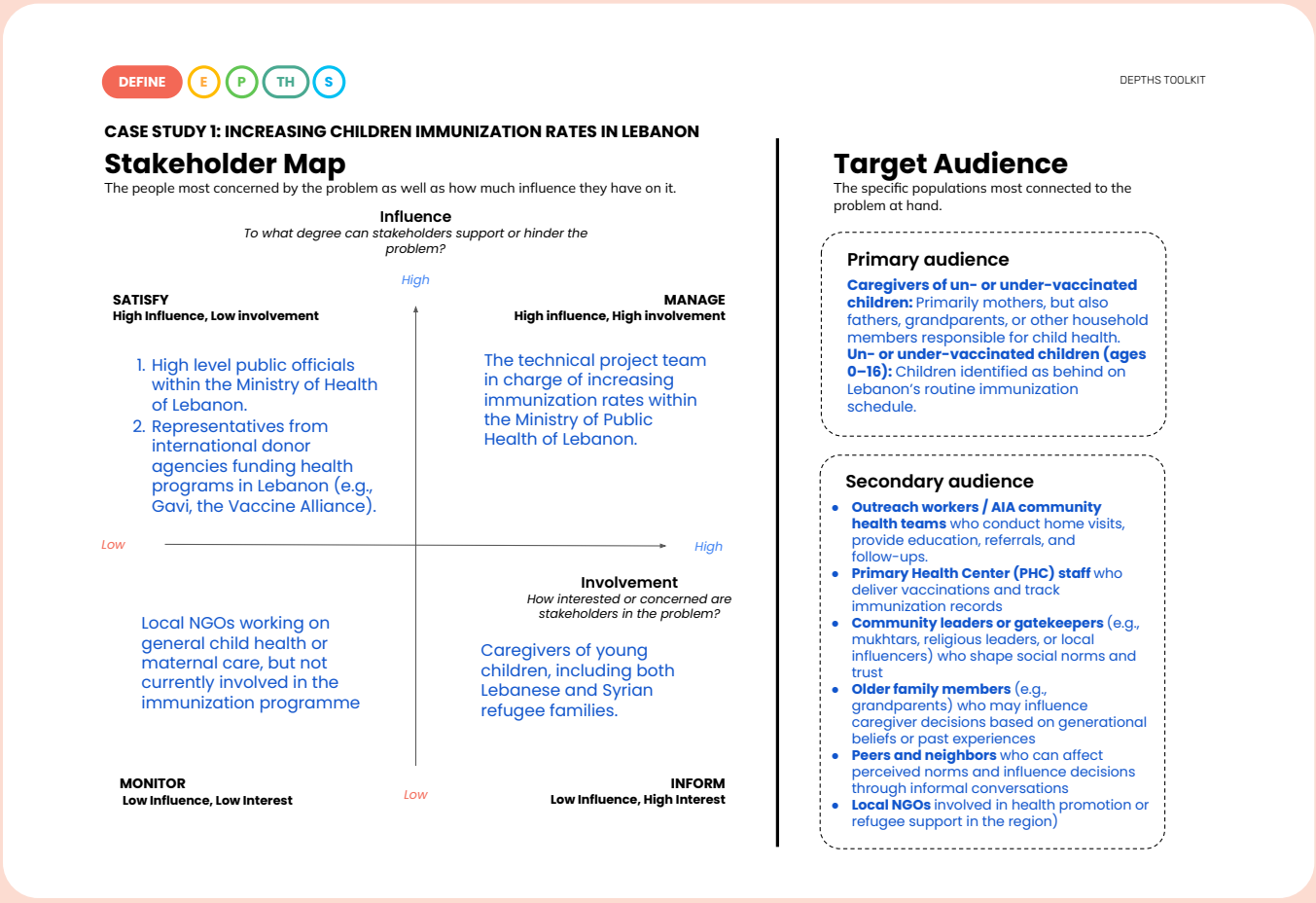
This Problem Definition and Outcome Statement was not developed by the original project team. It is a recreated example based on real project data and context. Its purpose is to illustrate what a completed Problem Definition and Outcome Statement worksheet could look like, in practice.

The project team was concerned by emerging evidence of missed vaccinations among both host communities and refugee populations, an issue that became more urgent after a rise in cases of measles and mumps. Despite the availability of free vaccines through primary healthcare centres, surveys conducted by the MoPH revealed clusters of under-immunized children, especially among families facing socio-cultural or logistical barriers.

To better understand the problem, the team reviewed health administrative data and engaged in conversations with health workers, outreach staff, and caregivers. The project team developed a clear outcome statement focused on increasing on-time vaccination among children under five in communities targeted by Lebanon's Accelerated Immunization Activities (AIA) programme.

Stakeholder mapping led to decisions to maintain a close and collaborative relationship with the technical team at the MOPH, given their high level of influence and involvement. High-level public officials – while influential – were kept informed without being overwhelmed by frequent updates or requests, ensuring their support without overburdening them.

Finally, researchers began brainstorming and mapping the primary and secondary audiences of the project. The primary audience included caregivers of un- or under-vaccinated children. Secondary audiences included,health workers, outreach teams, and community leaders. Their roles as trusted messengers, gatekeepers, or facilitators made them critical allies in shaping supportive environments for vaccination.



DEFINE E P TH S

DEPTHS TOOLKIT

CASE STUDY 1: INCREASING CHILDREN IMMUNIZATION RATES IN LEBANON

Stakeholder Map

The people most concerned by the problem as well as how much influence they have on it.

Influence
To what degree can stakeholders support or hinder the problem?

High

SATISFY
High Influence, Low involvement

1. High level public officials within the Ministry of Health of Lebanon.
2. Representatives from international donor agencies funding health programs in Lebanon (e.g., Gavi, the Vaccine Alliance).

MANAGE
High influence, High involvement

The technical project team in charge of increasing immunization rates within the Ministry of Public Health of Lebanon.

Low — High

Involvement
How interested or concerned are stakeholders in the problem?

Local NGOs working on general child health or maternal care, but not currently involved in the immunization programme

Caregivers of young children, including both Lebanese and Syrian refugee families.

MONITOR
Low Influence, Low Interest

Low

INFORM
Low Influence, High Interest

Target Audience

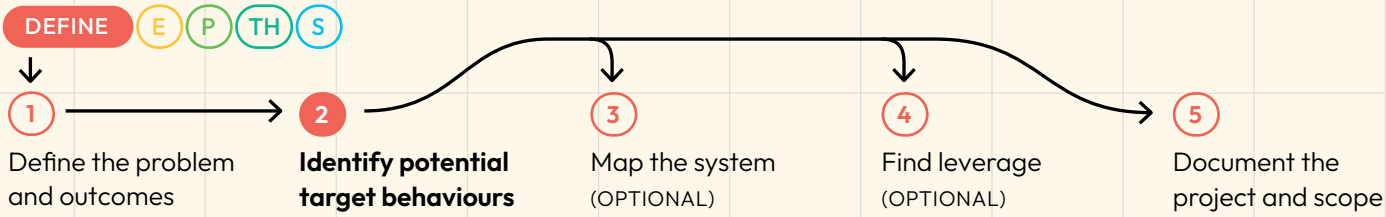
The specific populations most connected to the problem at hand.

Primary audience

Caregivers of un- or under-vaccinated children: Primarily mothers, but also fathers, grandparents, or other household members responsible for child health.
Un- or under-vaccinated children (ages 0–16): Children identified as behind on Lebanon's routine immunization schedule.

Secondary audience

- **Outreach workers / AIA community health teams** who conduct home visits, provide education, referrals, and follow-ups.
- **Primary Health Center (PHC) staff** who deliver vaccinations and track immunization records
- **Community leaders or gatekeepers** (e.g., mukhtars, religious leaders, or local influencers) who shape social norms and trust
- **Older family members** (e.g., grandparents) who may influence caregiver decisions based on generational beliefs or past experiences
- **Peers and neighbors** who can affect perceived norms and influence decisions through informal conversations
- **Local NGOs** involved in health promotion or refugee support in the region)



STEP 2:

Identify potential target behaviours

In this step:

Two tools support this step: the Behaviour Tree (to map behaviours) and the Prioritization Matrix (to select the most promising):

Associated tools:

- Behaviour Tree
- Prioritization Matrix

1. **Behaviour Tree worksheet:**
   This is a visual map that links the desired outcome to:
   - **a.** Key audiences (e.g., parents, health workers, teachers, or religious leaders).
   - **b.** The behaviours — or lack thereof — that affect the outcome for each audience group.

   The goal is to show how different individuals and their actions — or inactions — contribute to the issue. The Tree highlights where to position the intervention, in order to have the greatest impact.

2. **Prioritization Matrix worksheet:**
   This tool helps to narrow focus by comparing behaviours from the Behaviour Tree against two criteria:
   - **a.** **Feasibility**: How realistic is it to influence or change this behaviour?
   - **b.** **Impact**: How much would changing this behaviour contribute to the desired outcome?

   Many behaviours are important, but this matrix helps to prioritize one or two that are achievable and high impact.

Why it matters:

Behavioural science is fundamentally about understanding and influencing what people do. Without a clearly defined target behaviour, it is not possible to meaningfully investigate what drives or hinders change, design interventions that are likely to have impact, or evaluate whether efforts are achieving the intended effect.

It's easy to confuse behaviours with things like attitudes, emotions, or intentions. While these factors can influence behaviour, they are not behaviours themselves. A behaviour is a specific, observable action that a person takes. Not what they think, feel, or believe — rather, what they do. The table below shows how to reframe non-behaviours into true behaviours:

TABLE 3. BEHAVIOURS VS NON-BEHAVIOURS

NOT A BEHAVIOUR	WHY IT ISN'T A BEHAVIOUR	REFRAMED AS A BEHAVIOUR
Making caregivers understand the importance of vaccination	**Knowledge vs. Action:** While important, understanding is not something one can observe or reliably measure directly.	Caregivers take their child to a primary health centre within seven days of receiving a referral.
Increasing trust in vaccines among parents	**Belief vs. Action:** Trust influences action, but it can't be measured without interpretation.	Caregivers accept the vaccination without expressing hesitation when offered by the outreach worker.
Getting fathers more involved in vaccine decisions	**Vague vs. Specific:** 'Involvement' doesn't specify what action or decision the father is actually taking.	Fathers accompany the caregiver to the clinic or participate in outreach visits during immunization week.
Encouraging outreach workers to engage better with families	**Vague vs. Specific** 'Engage better' is ambiguous and subjective; it could mean many different things depending on the context.	Outreach workers explain the vaccination calendar and complete the referral form during every household visit.
Motivating caregivers to value routine immunization	**Intention vs. Behaviour:** Motivation is an internal driver; it's useful, but not directly observable or sufficient for behaviour change.	Caregivers mark the next vaccine date on the provided calendar and post it in a visible area at home.

How to do it:

1. Map behaviours

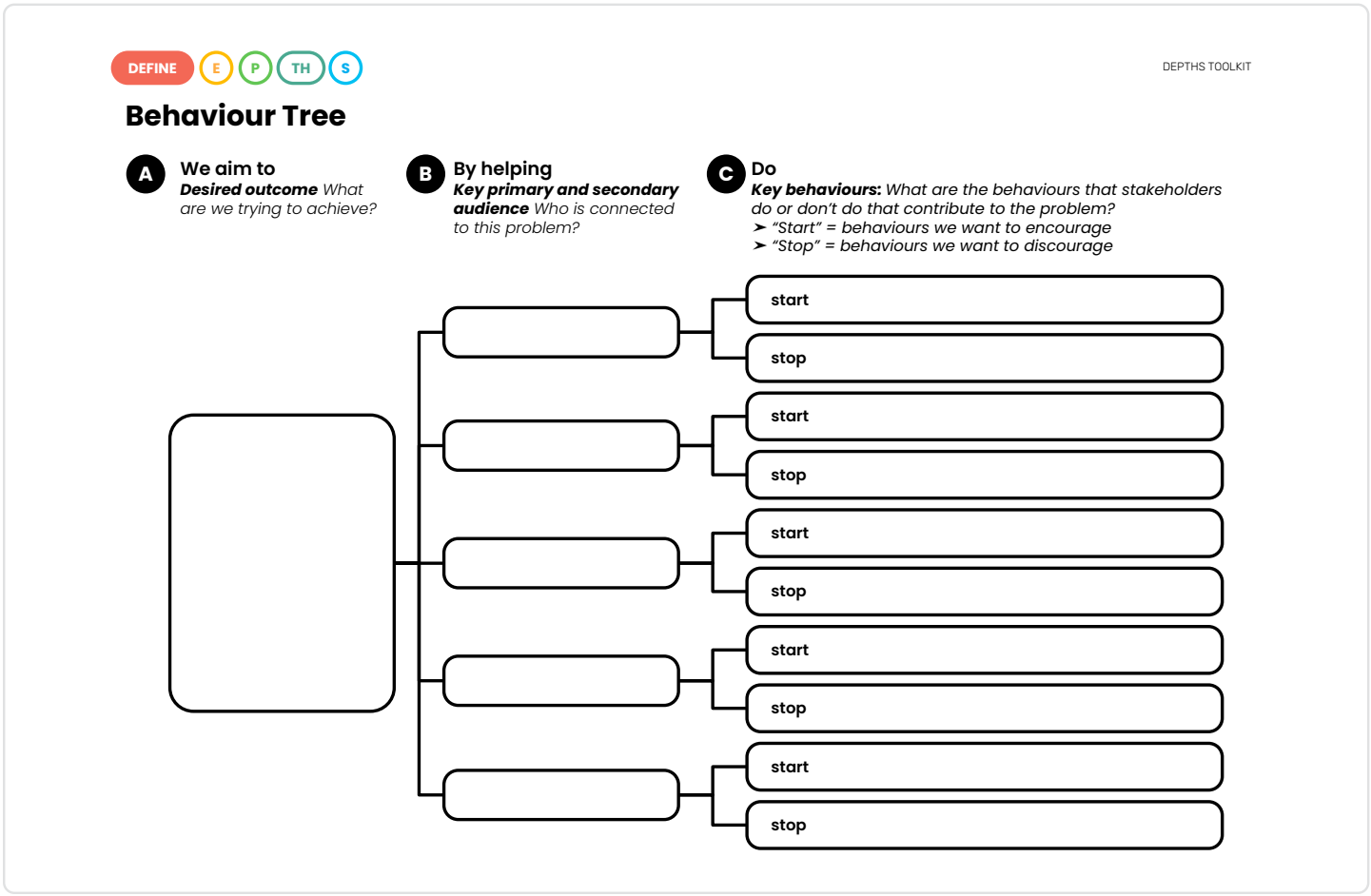
Use the **Behaviour Tree** worksheet to map out the behaviours that shape the target outcome:

a. Add the desired outcome in section A of the worksheet.

b. List the primary and secondary audiences identified in 'Step 1: Define the problem and outcomes' in section B.

c. For every audience listed in the Behaviour Tree, identify specific behaviours that influence the outcome in section C. This step is about surfacing both what's visible and what's missing in the behavioural landscape. Ask: What actions are each group currently taking that are helping — or hindering — progress? Are there helpful or positive behaviours these groups could be adopting, in order to support the project team to achieve its goals? Sort behaviours into two categories:

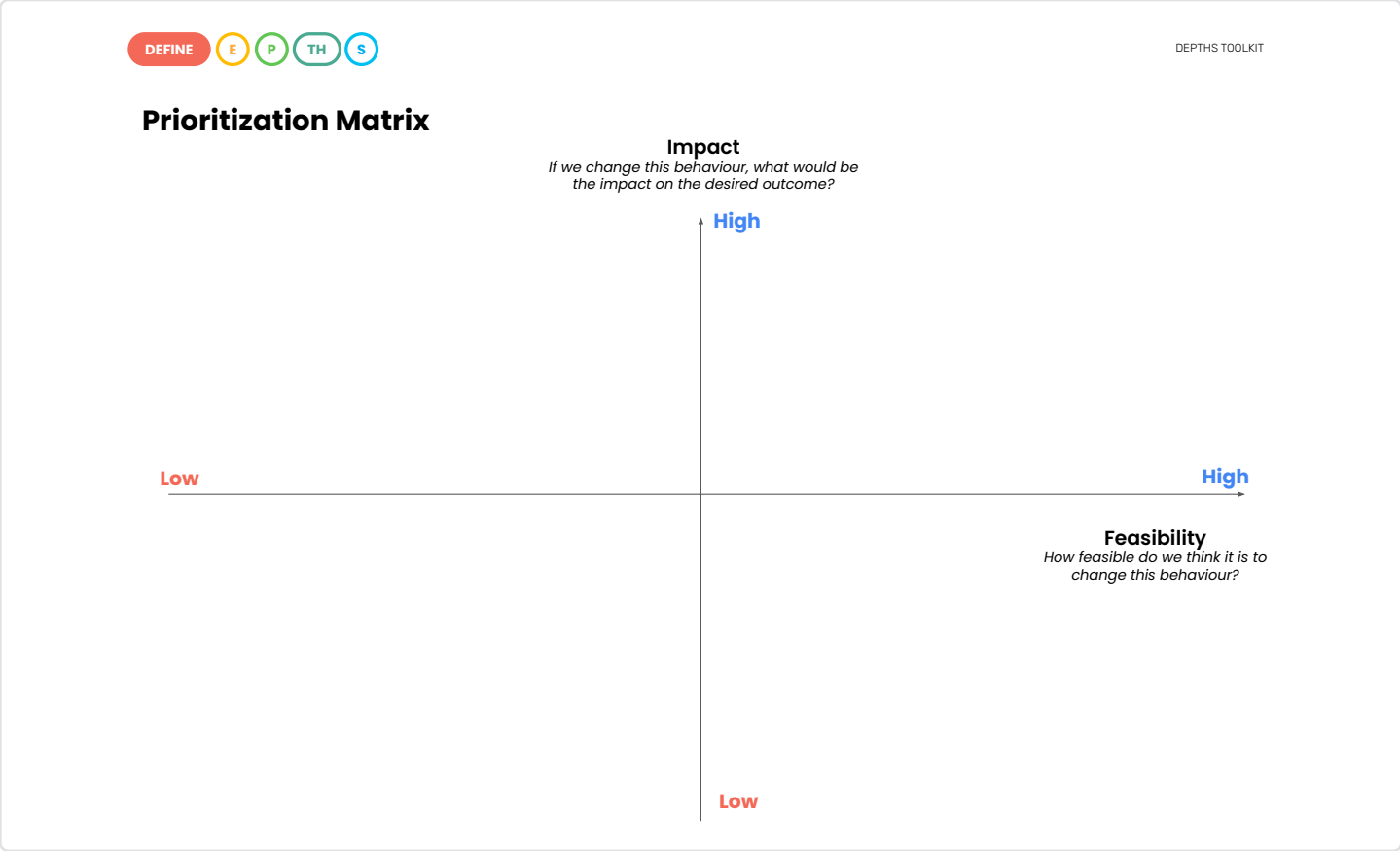
- **Start:** These boxes on the worksheet should include behaviours to encourage, which support the desired outcomes. These include both occurring behaviours that should continue, or new behaviours to take that further support the outcomes.
- **Stop:** These boxes should include behaviours to discourage, which are hindering the desired outcome.



To get the most out of the Behaviour Tree:

- **Start with a clear outcome.** The tree should always grow from a well-defined goal: desired outcome from Step 1.
- **If necessary, complement the initial list of audiences linked to the outcome.** The initial list of primary and secondary audiences from Step 1 should be comprehensive. This can be complemented by thinking broadly about people linked to the outcome.
- **Co-create whenever possible.** Local stakeholders and other team members bring lived experience that helps surface overlooked groups or behaviours, and prevents tunnel vision. There is no such thing as perfect information, but collaboration leads to a richer and more grounded understanding of the problem.
- **Focus on observable behaviours.** Remember, behaviours are things people *do*. If it can't be seen or measured, it's probably not a behaviour. Focus on what the person actually does, not what they think or feel.
- **Map what's there *and* what's missing.** Be sensitive to mapping both what people are doing and what they're not doing. This includes visible actions, like attending a health clinic or walking a child to school, as well as the absence of expected behaviours. It's often just as important to notice what's not happening: for example, caregivers not registering births, adolescents not attending counselling sessions, or men not accompanying partners to health visits.
- **Colour-code the Behaviour Tree.** Use a different colour for each stakeholder group and their specific behaviours. This will make prioritizing behaviours easier.

2. Prioritize behaviours



The **Prioritization Matrix** worksheet helps to sort through all of the identified behaviours and determine which ones are most worth acting on.

a. To start, take each of the behaviours from the **Behaviour Tree** worksheet and plot them on the matrix. Consider two factors:

- **Impact:** If this behaviour changed, how much would it improve the outcome?
- **Feasibility:** How realistic is it to change this behaviour, given the time, resources and context?

It might be helpful to think of a simple scale, like 'high', 'medium', or 'low', but expect to move things around. The matrix isn't static; it's a tool to organize your evolving thinking.

b. After placing behaviours on the matrix, select one to two to focus on for the next phase. This is usually a high-impact, highly feasible behaviour in the top-right quadrant, but it doesn't have to be. Real-world priorities like funding, partnerships, or existing initiatives may influence the prioritization of specific behaviours, and that's okay. The matrix is a guide, not a rule.

c. Finally, while prioritizing behaviours, try to avoid decision paralysis. Choosing a focus behaviour doesn't have to be perfect — it just needs to be thoughtful and grounded in what is known so far. Many teams refine their focus after doing deeper research in the next *Explore and Diagnose* phase.

3. Consult local stakeholders to validate assumptions

It's essential to pause and check any assumptions. True insight pairs technical expertise with lived experience. Too often, research agendas and funding priorities from the Global North set priorities on behalf of others. This can misalign efforts and overlook what matters most to communities.

Engaging local stakeholders, especially those closest to the issue, is one of the most effective ways to challenge biases. Estimating impact and feasibility is subjective, and the project team's perspective is just one piece of the puzzle. Involving colleagues, local partners, or people with different expertise can reveal new insights, challenge assumptions, and surface blind spots. Before moving to next steps, make sure to:

a. Discuss prioritized behaviours with the people most affected. Ask:

- Does this behaviour matter from their perspective?
- Are there parts of the problem that were misunderstood or overlooked?
- Are there other behaviours that feel more pressing or achievable?
- What would make this behaviour harder or easier to change?

b. Draw on participatory approaches. Validation doesn't have to be formal or extractive. It can range from informal conversations with community leaders to participatory techniques drawn from human-centred design[1].

A note on what comes next: This analysis may evolve if Steps 3 and 4 in the Define phase (system mapping and leverage points) are completed. These advanced steps explore root causes and influencing factors, and may refine the initial impact-feasibility assessment. Alternatively, teams can move directly to Step 5 and continue with the selected behaviour as the foundation for next phases.

1 "Human-centered design is a problem-solving technique that puts real people at the centre of the development process, enabling you to create products and services that resonate and are tailored to your audience's needs. The goal is to keep users' wants, pain points, and preferences front of mind during every phase of the process. In turn, you'll build more intuitive, accessible products that are likely to turn a higher profit because your customers have already vetted the solution and feel more invested in using it." — Landry, 2020, Harvard Business Review.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

The Behaviour Tree and Prioritization Matrix were not developed by the original project team. They are recreated examples based on real project data and context

Caregivers in Lebanon sometimes postponed or skipped appointments due to uncertainty, low perceived urgency, or confusion about the vaccine schedule. The team recognized this as a behaviour **to stop** or discourage, and contrasted it with a behaviour **to start**: caregivers proactively keeping track of their children's vaccine schedule and ensuring timely completion of all required doses.

Outreach workers were also found to occasionally dismiss caregiver concerns or skip the repetition of key messaging during household visits — actions **to stop** that could erode trust or leave key information unclear. More constructive alternatives included **starting** consistent practices such as explaining which vaccines were missing, repeating important information, and engaging caregivers in a respectful, supportive way.

By sorting these real-world behaviours into 'start' and 'stop' categories, the team gained a more grounded view of the human actions driving uptake, and highlighted which behaviours could have the most influence on outcomes.

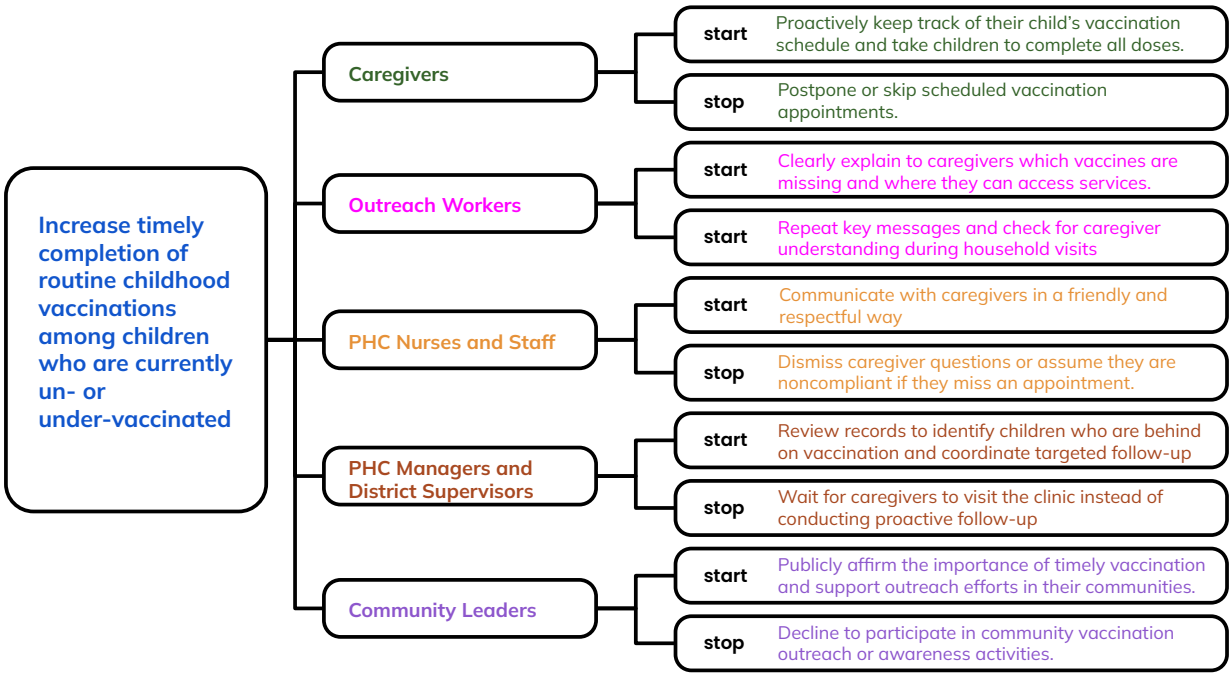
Behavior Tree

CASE STUDY 1: INCREASING CHILDREN IMMUNIZATION RATES IN LEBANON

A **We aim to**
Desired outcome *What are we trying to achieve?*

B **By helping**
Key primary and secondary audience *Who is connected to this problem?*

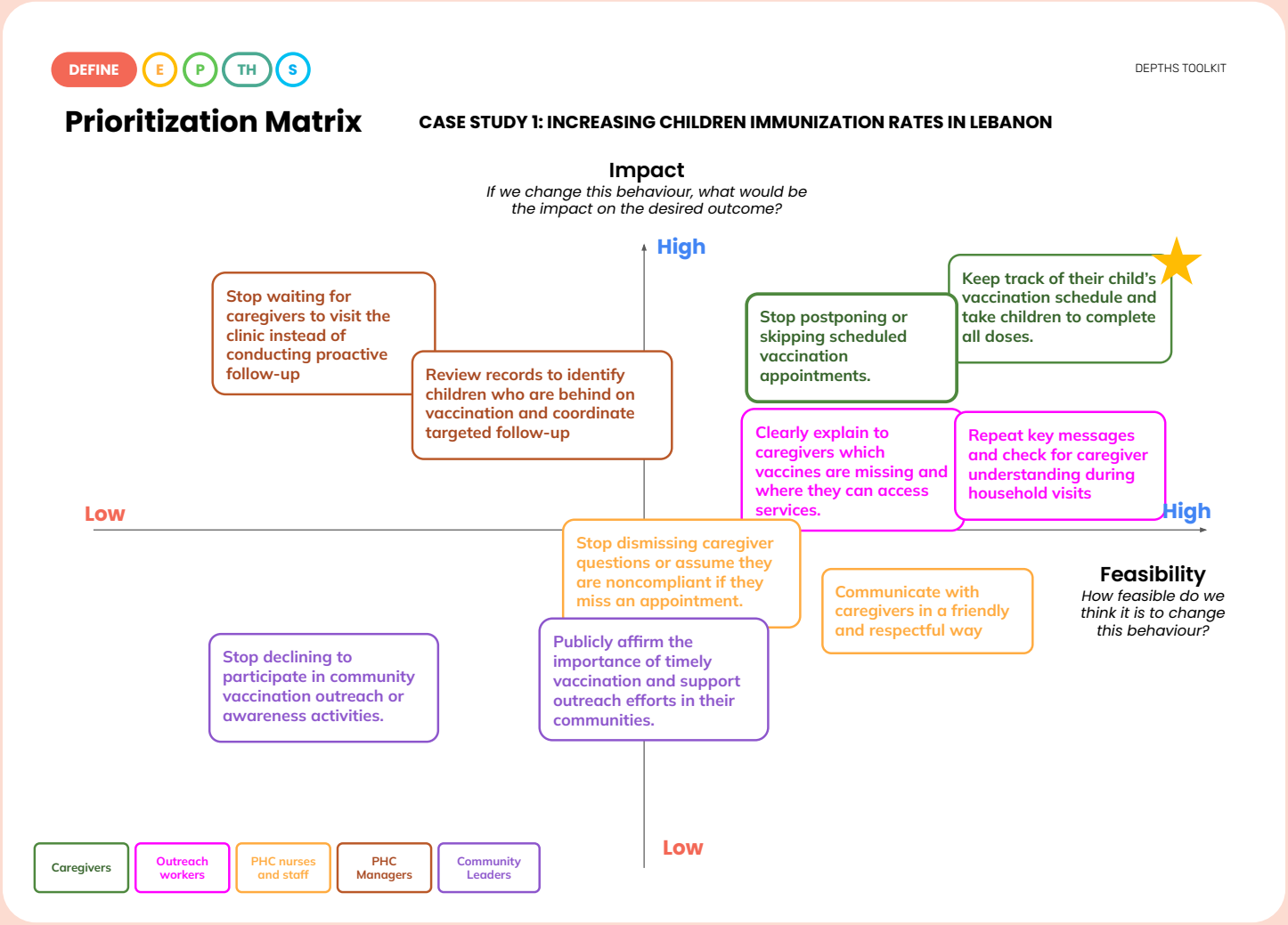
C **Do**
Key behaviours: *What are the behaviours that stakeholders do or don't do that contribute to the problem?*
➢ *"Start" = behaviours we want to encourage*
➢ *"Stop" = behaviours we want to discourage*

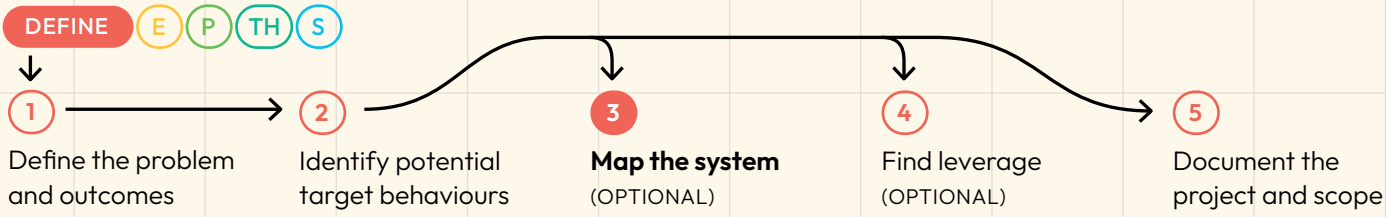


With the behaviour map in hand, the project team used the Prioritization Matrix to weigh each behaviour by its potential impact on routine immunization and the feasibility of change within project constraints.

One key behaviour emerged as both impactful and feasible: caregivers keeping track of their child's vaccination schedule and taking children to complete all doses. Supporting this planning behaviour could help transform intention into action, particularly where services were available but underused.

The team treated the matrix as a guide not a rigid decision-making tool. They recognized that further research might uncover new factors or more nuanced behavioural barriers. The **Behaviour Tree** and **Prioritization Matrix** together offered a structured but flexible way to ground the project in real-world actions, creating a stronger basis for targeted interventions.





STEP 3:
Map the system (OPTIONAL)

In this step:

This step will use the System Map worksheet to contextualize the problem by creating a visual diagram of:

- The elements influencing the outcome(s) of interest
- The relationships between these elements (e.g., reinforcing, blocking, or enabling)

The goal is to move beyond surface symptoms and clarify how forces like infrastructure, social norms, psychological barriers and institutional rules interact, so interventions can shift the system as a whole.

Associated tools:

- System Map

This step is optional.

So far, the focus has been on defining the problem and outcome, and identifying priority behaviours for each audience. Sometimes, this narrow lens can overlook system-level forces that shape behaviour.

Step 3: Map the system draws on systems thinking — an approach that identifies different parts of the problem, their interactions, and how they influence each other over time.

This step is optional, but valuable if you want to uncover hidden barriers, feedback loops, or enablers that may not be visible at the behavioural level. If ready to move ahead, skip to Step 5: Build the project canvas and continue using the prioritized behaviour(s) from Step 2.

Why it matters:

Context is everything. Behaviours don't happen in a vacuum. They're shaped by systems: rules, services, (dis) incentives, social norms and expectations, and much more. Mapping the environment around a behaviour helps to:

- Capture knowledge from different experts and stakeholders who may each only see *part* of the system
- Build consensus and a shared understanding across teams and partners
- Reveal hidden dynamics such as feedback loops, bottlenecks, or unintended consequences
- Shift conversations from blame to systems thinking to open up new possibilities for change

Without a clear view of the system, it's easy to mistake symptoms for root causes, or to design well-intended solutions that solve one problem but create another. A system map helps answer: What's really driving this outcome? How do all the parts interact? Where are the hidden levers for change?

About feedback loops

Feedback loops explain how a change in one part of a system circles back to influence the original variable again.

There are two main types:

- A **positive feedback** or Reinforcing loop (+): They push the system further in the same direction. This can amplify change by creating a self-reinforcing cycle that accelerates the original shift. (e.g., more parents vaccinate → trust in the health system grows → even more parents vaccinate).
- A **negative feedback** loop is a process through which a system responds to change by counteracting or reversing that change, helping the system maintain stability or return to its original state. For example, if a community begins to overuse a health service, wait times increase, which may discourage others from using it.

In feedback loops, one factor both causes and is caused by another factor and when mapped out, it's easier to see how influence flows in both directions. Recognising these loops early helps to avoid unintended consequences and spillover effects, and reveals where small shifts can have system-wide impact.

(See resources at the end of this chapter for more on feedback loops.)

How to do it:

1. Map factors

Start by returning to the anchor for system mapping: Your Outcome Statement from Step 1. Then start identifying the building blocks of the system – the behaviours and their drivers. These include:

a. **Behaviours**: from Step 2 (Behaviour Tree)

b. **Drivers**: psychological (beliefs, emotions, routines, or cognitive biases), socio-cultural (norms, status, peer pressure, or cultural expectations), and environmental factors (access to infrastructure, availability of services, or physical surroundings) shaping those behaviours

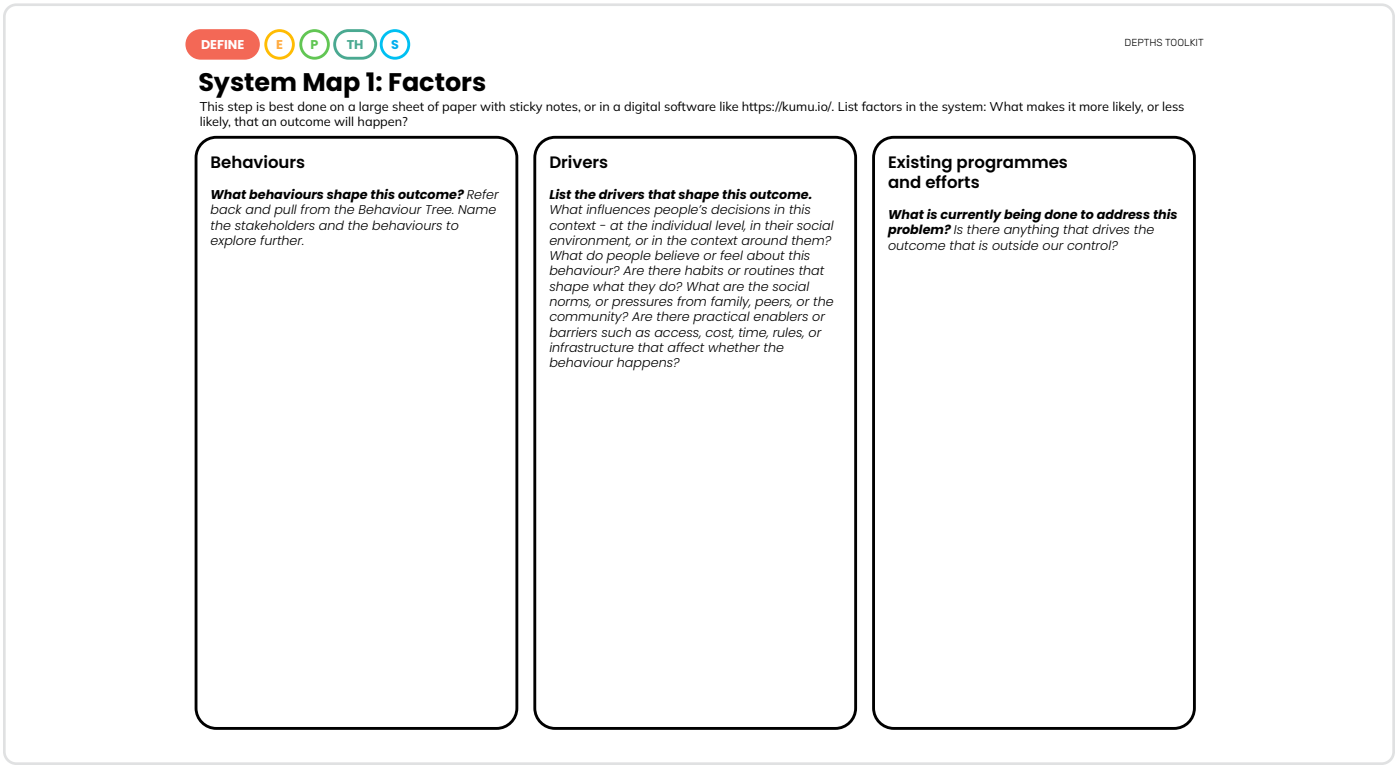
c. **External influences**: existing programmes (community mobilization, outreach, other government programs etc.), policies (mandates, legislation, existing partnerships etc.), or broader context (e.g. economic instability, geographic barriers, humanitarian emergencies, conflict, misinformation)

Use the **Systems Map 1: Factors** worksheet:

- List key behaviours in the first column
- Add underlying drivers (beliefs, norms, access, rules, etc.) in the next columns
- Record existing efforts (programmes, policies, contextual factors) in the final column

Tips while mapping out factors:

- Look beyond the individual: Behaviour is shaped by context (e.g., norms, services, or infrastructure), not just personal choices.
- Don't aim for "the perfect driver": If a driver might be influencing the behaviour, include it. The drivers will be refined later in the process.
- Anchor in the Outcome Statement from Step 1 to stay focused.



DEFINE E P TH S

DEPTHS TOOLKIT

System Map 1: Factors

This step is best done on a large sheet of paper with sticky notes, or in a digital software like https://kumu.io/. List factors in the system: What makes it more likely, or less likely, that an outcome will happen?

Behaviours	Drivers	Existing programmes and efforts
What behaviours shape this outcome? *Refer back and pull from the Behaviour Tree. Name the stakeholders and the behaviours to explore further.*	***List the drivers that shape this outcome.*** *What influences people's decisions in this context - at the individual level, in their social environment, or in the context around them? What do people believe or feel about this behaviour? Are there habits or routines that shape what they do? What are the social norms, or pressures from family, peers, or the community? Are there practical enablers or barriers such as access, cost, time, rules, or infrastructure that affect whether the behaviour happens?*	***What is currently being done to address this problem?*** *Is there anything that drives the outcome that is outside our control?*

2. Build the system map

Next, bring the system to life visually using the **System Map 2: Map the System** worksheet (on a large piece of paper using sticky notes or with a digital tool like Miro, Kumu or Figma.[2])

a. **Place the outcome statement** (from Step 1) at the centre or top of the map, summarizing it in just a few words (e.g., 'increase timely completion of routine childhood vaccinations'). To make it stand out, place it in a shape, like a rectangle. Everything else on the map should connect back to this visualized outcome.

b. Add **key behaviours** (from Step 2 and also in System Map 1: Factors worksheet). Place them around the outcome and begin noting which stakeholders they relate to.

c. Link **drivers** (from the System Map 1: Factors worksheet) to the behaviours they influence with arrows.

d. Include **external factors and existing efforts**. Add in programmes, policies, services, and broader contextual factors that impact the drivers or behaviours from column 3 ('Existing programmes and efforts') of the System Map 1: Factors worksheet. Mark which ones are within scope and which are not.

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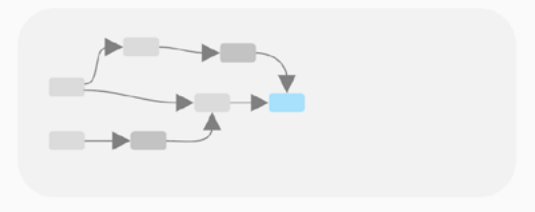
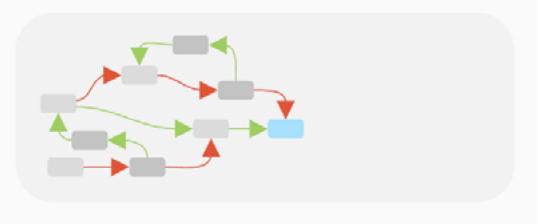
2 These are collaborative digital tools that allow teams to create and edit visual diagrams in real time. They are ideal for mapping exercises.

e. Draw arrows to show **causal links** between elements. Show how one factor leads to or reinforces another. Ask: Does this factor affect that one? How? The arrows should point in the direction of influence, helping to visualize the causal chain.



f. **Add causal signs to the arrows** to show the type of effect each relationship represents and how the connections behave.

- (+) Positive: one factor increases the other (e.g., trust ↑ → vaccination ↑).
- (–) Negative: one factor reduces the other (e.g., wait times ↑ → satisfaction ↓)



g. Identify **downstream effects**. Ask: What happens if the outcome is achieved,or not? Ask:

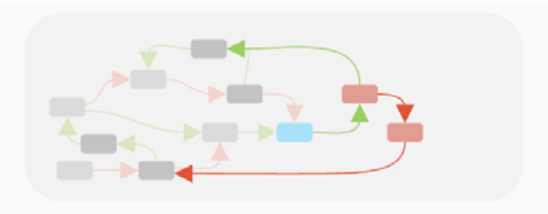
- What longer-term or indirect effects might result from achieving this outcome?
- What risks or unintended consequences could emerge?

Add new boxes to the system map to represent each downstream effect. These effects could include impacts on health, learning, wellbeing, trust, productivity, or other areas.

Next, connect each downstream effect to the outcome with an arrow that shows the direction of influence. Just like before, use causal signs and add:

- A green arrow or plus sign (+) if the outcome increases the downstream effect
- A red arrow or minus sign (–) if it decreases the effect

This step helps to visualize the broader implications of the team's outcome — and understand why it matters within the larger system.



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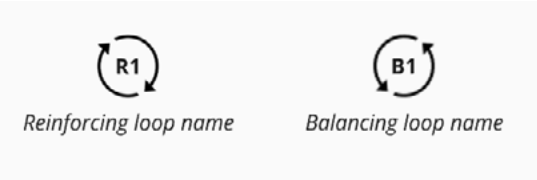
h. Look for **feedback loops to highlight** when one factor influences another and that second factor, in turn, circles back to influence the first. This is where systems thinking becomes especially useful.



For example, a caregiver's distrust in the health system may lead them to delay or avoid vaccination. As fewer families participate in immunization, public health services become less visible or underutilized, which can reinforce perceptions that the system is unreliable, hence deepening the original distrust. In this example, labelling the feedback loop (e.g., 'trust erosion loop') can be helpful.

In the context of the case study on increasing timely childhood vaccination in Lebanon, consider this loop:

A caregiver delays taking their child for their routine vaccinations...

- ...increasing the chances of the child falling ill or missing scheduled doses...
- ...reinforcing the caregiver's belief that vaccination is complicated or not urgent...
- ...reducing their likelihood of responding to future reminders...
- ...therefore reinforcing the pattern of delayed or missed vaccinations.

Here, delayed vaccination both causes and is caused by negative perceptions and low follow-through, a classic negative reinforcing loop. Without breaking the cycle, the problem can intensify over time. Mapping these loops helps make it more clear where interventions can disrupt harmful cycles or strengthen positive ones.

i. **Consider differences across groups.** Ask: Is this experience the same for everyone? Are there historical disparities or social differences that might mean certain groups – like women, ethnic minorities, or rural populations — experience the system differently? Use notes, colour coding, or separate maps to highlight differences by gender, geography, ethnicity, disability, or other inequities Alternatively, a second version of the map that focuses solely on a particular subgroup can be developed. This can help ensure that analysis is inclusive and informed by principles of equity.

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j. Finally, **share the systems map**. Treat the system map as a living document. Share it with colleagues, experts, and community stakeholders to check assumptions, fill gaps, and build shared ownership.

More information is available on system maps in the toolkit and training materials.

A few tips for the process of creating a system map:

- **Like any new skill, system mapping takes practice.** It may feel a bit messy or overwhelming at first, but it becomes easier (and the map becomes more insightful) with practice.
- **Focus on relationships, not just factors.** The power of a system map lies in how elements connect. Don't just list parts, map how they influence one another.
- **Don't aim for perfection.** The first map developed won't be the last. Think of it as a working draft that evolves as understanding grows.
- **Make it collaborative.** Mapping with others brings new perspectives, reveals blind spots, and builds shared ownership of the problem and its potential solutions.
- **Keep it visual.** Use colours, arrows and spacing to make relationships clear. If it's too dense to read at a glance, try simplifying or rearranging.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

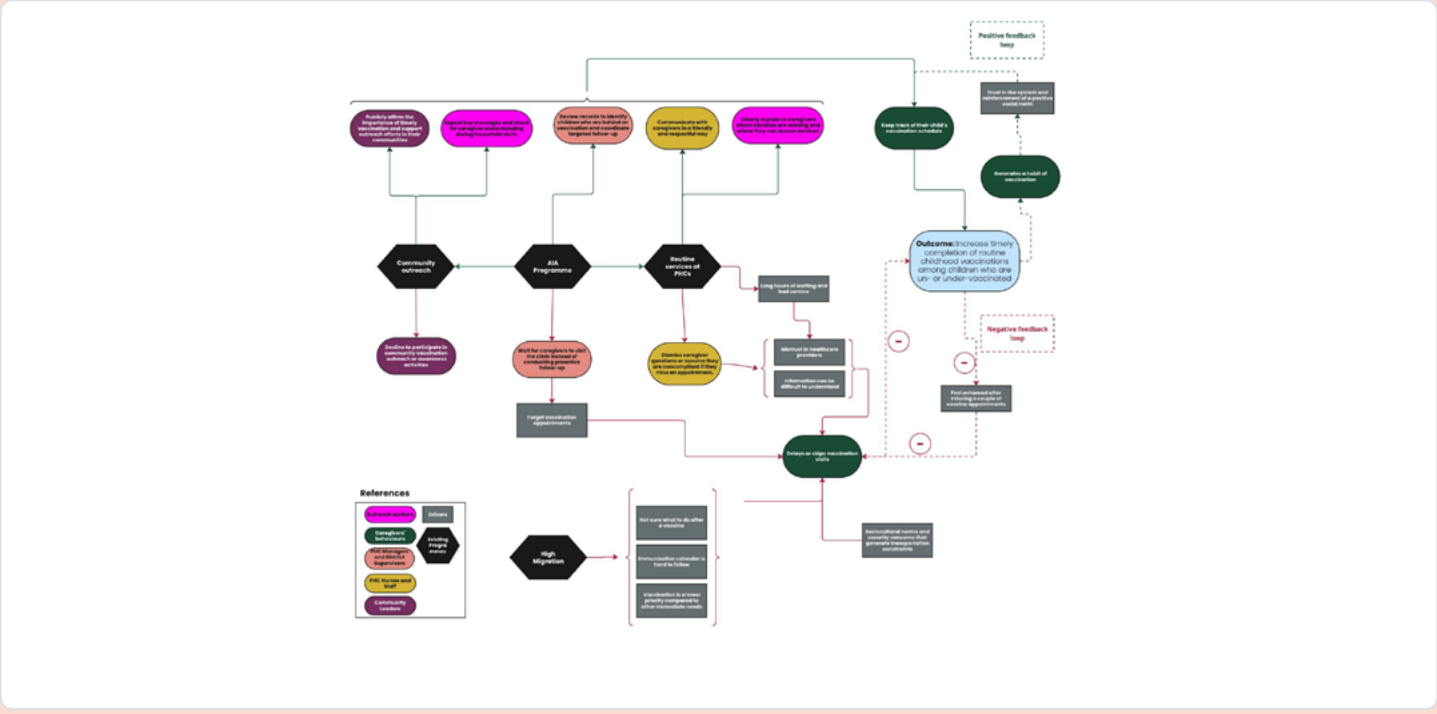
The System Map was not developed by the original project team. It is a recreated example based on real project data and context.

Before building the system map, the research team compiled a list of key behaviours, influencing factors (or drivers), and existing efforts. These components related to their outcome statement: increasing the timely completion of routine childhood vaccinations among children who are currently un- or under-vaccinated. They included:

- **Behaviours:** Most of the behaviours had already been identified and mapped in the **Behaviour Tree** exercise. These included actions such as caregivers responding to follow-up visits or Primary Healthcare Centre (PHC) staff reviewing vaccination records proactively.
- **Drivers:** Drawing on stakeholder conversations, prior existing data, and their experiences, the team listed potential drivers that might affect vaccination behaviours. For instance, they noted that some caregivers lacked trust in health workers, while others were constrained by time, mobility, or competing responsibilities. Additionally, social norms and misinformation shaped caregivers' beliefs about when, where and by whom children should be vaccinated.
- **Existing programmes and efforts:** As vaccination had long been a national health priority, the team considered ongoing initiatives, such as the Accelerated Immunization Activities (AIA) programme led by the Ministry of Public Health with UNICEF support. This programme included door-to-door outreach visits, referrals to PHCs, and caregiver education campaigns. The team also considered contextual factors like the refugee crisis, limited healthcare capacity, and pockets of low coverage identified in previous surveys.

Mapping behaviours

Starting with the desired outcome (i.e., the timely and complete vaccination of children) the project team added key behaviours from the **Behaviour Tree** exercise. They selected only the most relevant actions across the different audiences they had mapped, such as caregivers attending appointments, outreach workers providing referrals, and PHC staff updating records. The team maintained consistent colour coding to make the map easier to interpret and share with partners.



Mapping drivers

Next, the team layered in drivers, i.e., social, psychological, and environmental factors that influenced whether the behaviours occurred or not. These included:

- **Psychological drivers:** Caregivers underestimated the importance of timely vaccinations or assumed that minor delays were harmless.
- **Socio-cultural drivers:** In some communities, norms discouraged women from travelling alone, making it harder for mothers to take children to PHCs without accompaniment.
- **Environmental drivers:** Transportation barriers, long wait times at clinics, or unclear follow-up instructions created practical obstacles to vaccine completion.

These insights helped to reveal the range of factors shaping behaviour, beyond solely knowledge or access.

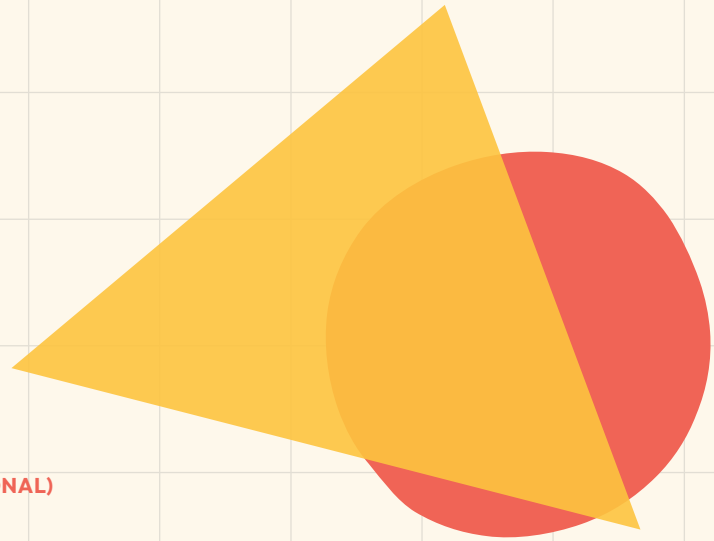
Mapping relationships and downstream effects

The system map also visualized how different behaviours and drivers were connected. For example, when nurses don't answer caregivers' questions in plain language, caregivers may feel confused. This confusion can lead to missed or delayed appointments. Over time, repeated missed visits may cause caregivers to feel ashamed and disengage from the health system altogether. Mapping these links helped the team to identify not only individual behaviours, but how the system either enabled or hindered change.

Feedback loops

Two key feedback loops emerged in the system. One was negative: caregivers who missed appointments felt confused or embarrassed, which lowered their likelihood of engaging with follow-up outreach. This effectively deepened mistrust and increased the chances of future missed vaccinations — causing a reinforcing cycle of disengagement.

The second loop was positive: when caregivers received friendly, timely follow-ups, and clear information, they were more likely to complete vaccination schedules. This strengthened their confidence in the health system, making them more likely to respond to future outreach and even encourage others — building a cycle of trust and engagement.



STEP 4:
Find leverage (OPTIONAL)

In this step:

In this step, you'll look at your system map to spot leverage points: places where change is both possible and powerful. For each, consider what behaviour could shift, what ripple effects it might create, and how realistic it is to act on. Leverage points are places in the system where small, strategic behaviour changes can unlock big improvements in outcomes. By analysing the system map, teams can identify leverage points and add them back into the map as strategic actions to guide the next phases of the project. This step helps ensure focus on a behaviour that is both impactful and realistic to implement.

Associated tools:

- Leverage Point Analysis

This step is optional.

Step 4 is also an optional step. However, if a system map was developed earlier (Step 3), it's strongly recommended to follow this step.

To 'Find leverage', the map is employed to identify leverage points. These are specific parts of the system where a strategic behaviour change could lead to a significant improvement in outcomes.

This step will help to:

- List promising behaviour changes that could shift key parts of the system
- Show ripple effects (i.e., how each behaviour change might influence other elements) across the system
- Assess feasibility by considering how realistic or actionable each leverage point is
- Restate the most promising leverage point and behaviour to change, which will guide the next phase: Explore and Diagnose

Why it matters:

Not every part of a system offers the same opportunity for change. Some elements are deeply entrenched or difficult to shift, while others, though seemingly small, can unlock significant changes in outcome. Those high-impact opportunities are known as leverage points. To identify leverage points, there are four key elements of analysis, which include:

- promising factors in the system
- potential behavioural changes related to those factors
- the ripple effects that such changes might generate across the system
- the feasibility of influencing those behaviours given the time, resources, and context

For instance, giving caregivers a personalised calendar with their child's photo and next vaccine date visibly marked may seem like a small change, but it can significantly improve timely immunisation by increasing salience, strengthening commitment, and providing a culturally resonant, low-cost prompt in the home.[3]

Identifying leverage points is how one moves from understanding a system to influencing it. With a clearer view of the key behaviours, drivers, and feedback loops, now begin to ask: Where could an intervention make the biggest difference?

Keep in mind: there is rarely one perfect solution. Instead, look for a few promising leverage points to explore and test further.

3 Abbott, P., Menzies, R., Davison, J. et al. Improving immunisation timeliness in Aboriginal children through personalised calendars. BMC Public Health 13, 598 (2013). https://doi.org/10.1186/1471-2458-13-598

How to do it:

1. Identify promising factors

Use the Leverage Point Analysis worksheet in the toolkit to help guide this reflection. Here's how to start:

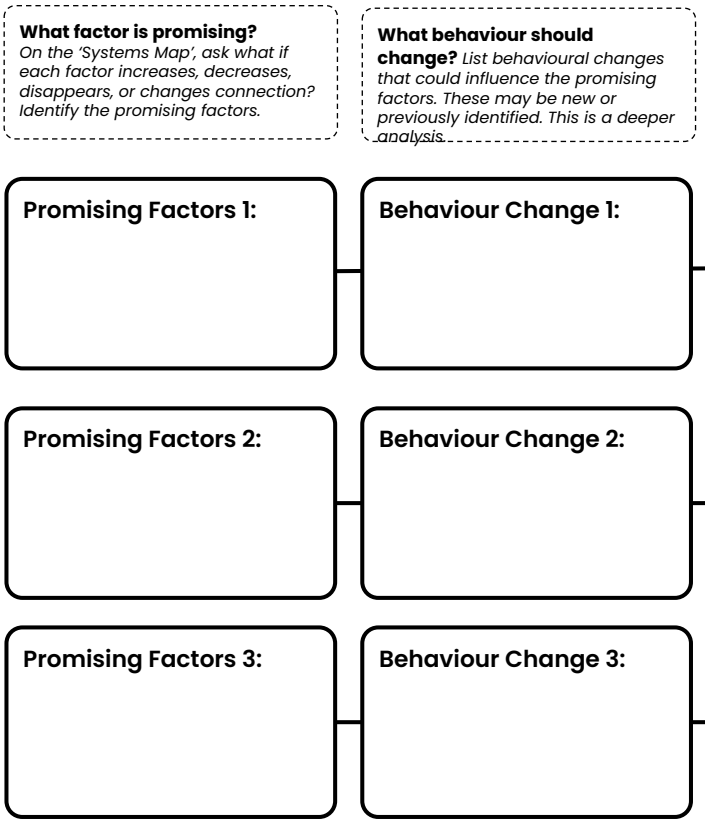
a. Begin by revisiting the system map. Reflect on each factor – whether it's a behaviour, driver, or existing programme – and how it connects to others. Then, ask a few 'what if' questions to explore possible shifts:

- What would happen if this factor increased?
- What if it decreased?
- What if it disappeared completely, or connected to a different factor in a new way?
- Could a feedback loop be shifted to produce a better outcome?

For example, in the case of improving childhood immunization in Lebanon, factors to identify could include caregivers being more aware of their child's missed vaccinations or Primary Health Centre staff proactively following up with families who miss appointments. Each of these, if shifted, could trigger a positive ripple effect – such as improving trust, boosting follow-through, and ultimately increasing timely vaccine uptake. Focus on writing down factors that are considered both important and realistically influenced by one specific behaviour change.

b. Next, use the second column of the Leverage Point Analysis worksheet to write down potential behavioural changes that are related to the promising factors identified. These may be behaviours previously identified in Step 2 or new ones that emerged when reviewing the system as a whole.

This step takes the analysis deeper. It may confirm earlier behaviours or refine them. Changes might mean reducing or replacing a harmful behaviour, adding a new positive one, or scaling up an existing helpful one. Look for high-leverage points: areas where a small shift in behaviour can lead to a disproportionately large impact on the project's outcome. Don't worry about narrowing things down just yet – focus on capturing a range of possibilities.



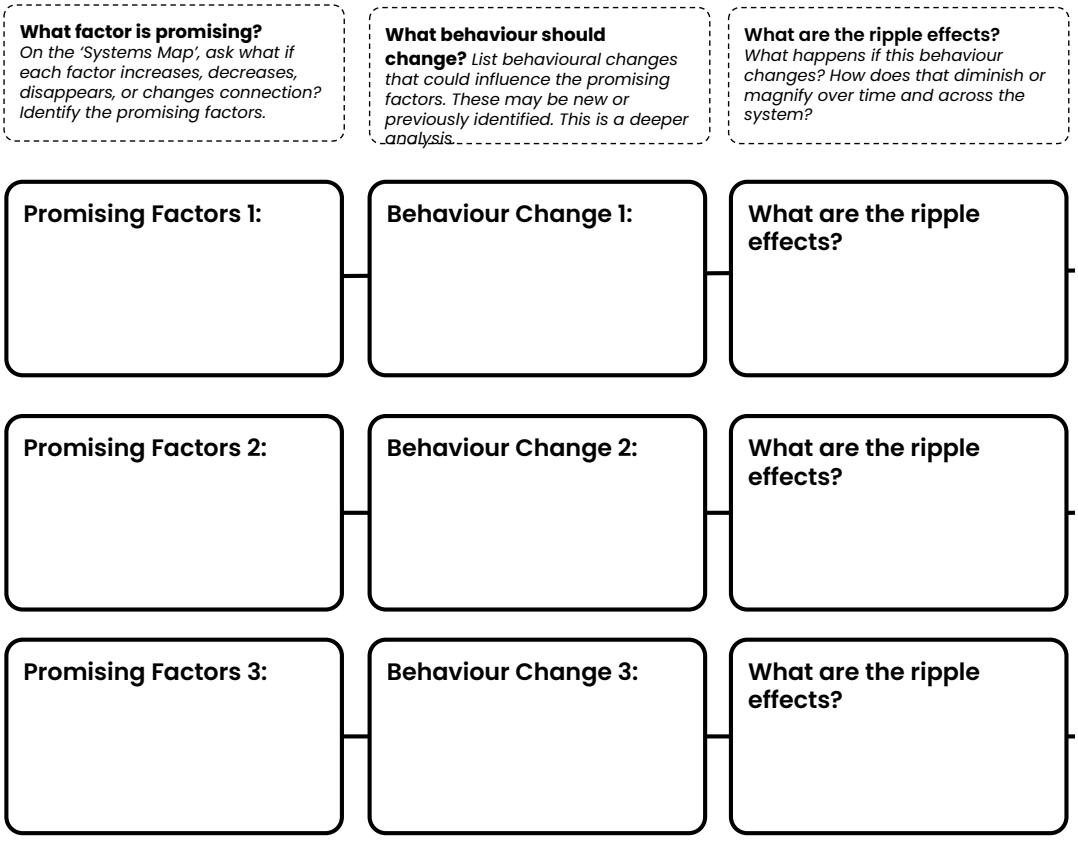
2. Consider the ripple effects

Next, continue working on the **Leverage Point Analysis** worksheet by exploring how each potential behaviour change might ripple through the system.

a. For each behaviour change listed in the first column, ask: **What new outcomes might this trigger?** Could it cause downstream effects that amplify (or weaken) the original impact? How might it affect other parts of the system or other stakeholders over time? Write these reflections in the third column of the worksheet.

b. Rather than isolating each behaviour, **consider how a single shift could cascade across the system**, uncovering new opportunities or unintended consequences. The goal is to help compare and prioritize different leverage points based on their broader potential for impact.

For example, encouraging caregivers to proactively check their child's vaccination status and plan their visit in advance could have ripple effects such as improving the timeliness of vaccine uptake, reducing missed opportunities at clinics, and boosting overall trust in the health system. This could further ease pressure on outreach teams, who would spend less time tracking families for follow-up. The goal is to identify behaviour changes that don't just move the needle — they can multiply their impact across the system.



3. Evaluate feasibility

The best leverage points balance impact and feasibility. First, ask:

- Is this behavioural change realistic within our context?
- Can the team or organization actually influence this behaviour?
- What kind of financial, technical, or human resources would be required to change this behaviour?
- How likely is it that this behaviour change will succeed?

Record the answers in the third column of the **Leverage Point Analysis** worksheet.

a. This assessment builds on the initial feasibility thinking introduced through the **Prioritization Matrix** in Step 2. At that stage, teams began identifying and comparing potential behaviours. Now, with deeper analysis from the system mapping and leverage point exercises, those early ideas can be revisited with greater insight. Some of the behaviours prioritized in Step 2 may still hold, while others may shift based on new insights.

b. Even if a change could be highly impactful, it may not be feasible in practice. For example, sending trained outreach teams door-to-door daily to remind caregivers of appointments might boost vaccine uptake significantly. However, doing so consistently at scale could require substantial staffing, funding and coordination. In short, the costs and operational burden might outweigh the benefits, and feasibility matters just as much as potential impact.

What factor is promising? *On the 'Systems Map', ask what if each factor increases, decreases, disappears, or changes connection? Identify the promising factors.*	**What behaviour should change?** *List behavioural changes that could influence the promising factors. These may be new or previously identified. This is a deeper analysis.*	**What are the ripple effects?** *What happens if this behaviour changes? How does that diminish or magnify over time and across the system?*	**Is it realistic?** *Can UNICEF drive this behaviour change? Is it cost-effective and feasible with time constraints and expertise?*
Promising Factors 1:	**Behaviour Change 1:**	**What are the ripple effects?**	**Is it realistic?**
Promising Factors 2:	**Behaviour Change 2:**	**What are the ripple effects?**	**Is it realistic?**
Promising Factors 3:	**Behaviour Change 3:**	**What are the ripple effects?**	**Is it realistic?**

4. Choose leverage points

After exploring several options, the next step is to select one leverage point, along with its associated behaviour change, that is most aligned with the team's goals, expertise, and operational constraints. This leverage point should sit in that 'sweet spot':, a behaviour that is both highly impactful and realistically achievable within our context.

Here's what to do:

a. The chosen leverage point may align with the target behaviour identified earlier using the **Prioritisation Matrix** in Step 2. If so, this reinforces the earlier decision. If not, that's perfectly acceptable — any differences can offer valuable insight. This step is designed to deepen understanding. A shift in focus, prompted by the system map or ripple analysis, may reveal a more promising entry point for intervention.

b. In order to choose the most promising leverage point, use the following set of criteria:

- **Feasibility:** Can we realistically influence this behaviour?
- **Impact:** If we succeed, how much would it move the needle on our outcome?
- **Equity:** Will this change promote a more equitable system or intervention?

c. Once a choice is made, return to the system map. Mark the leverage point clearly and highlight the behaviour it will target. Visually locating the intervention helps to clarify how it fits into the larger system and prepares the team for the next phase of work.

Before selecting leverage points, keep these tips in mind:

- **Avoid jumping to solutions.** This step is about understanding the system – not solving it yet. Focus on the behaviours (or lack thereof) that drive the problem, not on potential interventions.
- **Look carefully at behaviours that seem obvious.** We're all prone to availability bias – defaulting to what comes to mind easily. But 'familiar' does not necessarily mean 'successful'. It's important to explore a wider range of behaviour changes and evaluate them systematically.
- **Review existing evidence.** Before locking in a leverage point (i.e., target change in behaviour), check whether there is already research or experience showing what kinds of changes have worked in similar contexts. Build on what is known.
- **Consult subject matter experts and engage the community.** Talk to subject matter experts and community members: What would it mean to change this behaviour from your perspective?
- **Stay flexible.** The behaviour and leverage point chosen in this moment isn't final. It will continue to be validated and refined during the next phase, *Explore and Diagnose*. It's completely normal and encouraged for the focus to evolve as the team learns more.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

The Leverage Point Analysis shown here is a recreated example based on real project data, used to illustrate what a completed tool could look like in practice.

Identifying promising factors and evaluating feasibility

The project team revisited their system map to examine the factors most strongly linked to their outcome: increasing timely completion of routine childhood vaccinations among un- or under-vaccinated children. For caregiver-focused behaviour, two key dynamics stood out. Caregivers often forgot appointments or deprioritised vaccines compared to urgent needs like food, work, or safety. These factors shaped real-world behaviour and were identified as promising to shift through targeted nudges or reminders.

For Primary Healthcare Centre (PHC) staff, the team identified a critical moment during clinic visits: caregivers were not always clearly told when to return or what vaccines remained. Although this information was part of the standard service, it was often skipped or inconsistently shared. This gap represented a missed opportunity to encourage proactive follow-through. Outreach workers in close contact with caregivers, often used unclear or overly technical messages. As a result, caregivers were left unsure what to do, where to go, or why completing the schedule mattered. These breakdowns in communication were identified as system weaknesses with high potential for improvement.

What factor is promising? *On the 'Systems Map', ask what if each factor increases, decreases, disappears, or changes connection? Identify the promising factors.*	**What behaviour should change?** *List behavioural changes that could influence the promising factors. These may be new or previously identified. This is a deeper analysis.*	**What are the ripple effects?** *What happens if this behaviour changes? How does that diminish or magnify over time and across the system?*	**Is it realistic?** *Can UNICEF drive this behaviour change? Is it cost-effective and feasible with time constraints and expertise?*
Promising Factors 1: Caregivers may forget vaccination appointments due to stress and competing priorities. Vaccination may be a low priority compared to urgent needs like food or work.	**Behaviour Change 1:** Caregivers build a consistent habit of attending vaccination appointments on time.	**What are the ripple effects?** Timely attendance improves vaccination completion rates, reinforces a culture of preventive health, and reduces the burden of follow-up on HCWs. Over time, this can increase trust in health services and normalize on-time vaccination in the community.	**Is it realistic?** Yes. This behaviour is already aligned with caregivers' goals but undermined by forgetfulness or unclear scheduling. It can be influenced through low-cost tools like reminders and planning supports, especially if paired with interpersonal reinforcement.
Promising Factors 2: The immunization calendar may be hard to follow. Caregivers may lack clarity on what to do after outreach	**Behaviour Change 2:** PHC staff routinely inform caregivers of the next vaccine date and encourage them to plan ahead.	**What are the ripple effects?** Clear next steps reduce drop-off between doses and increase caregivers' follow-through confidence and planning capacity.	**Is it realistic?** Yes. This fits within PHC staff's existing role. With supportive prompts, brief training, or standardized scripts, this behaviour can be adopted without major additional workload.
Promising Factors 3: Information may be misunderstood or not retained after visits. Repeated missed opportunities might discourage follow-through.	**Behaviour Change 3:** Outreach workers clearly explain the vaccination schedule and build urgency during home visits.	**What are the ripple effects?** Better messaging increases caregivers' understanding and perceived importance of timely vaccination, leading to more follow-through. Over time, this builds demand for vaccines and reduces the need for repeated visits and reminders.	**Is it realistic?** Yes, though it may require modest investment in job aids or training to ensure clarity, consistency, and empathy in outreach messaging. The role already exists and the change is an enhancement rather than an overhaul.

Evaluating leverage points and selecting promising behaviours

With these insights in place, the team identified three promising behaviour changes. One of the most impactful and feasible was supporting caregivers in developing a consistent habit of attending vaccination appointments on time. This change aligned with their existing intentions, but was undermined by forgetfulness or confusion. If reinforced with simple planning aids and trust-based reminders, it could raise timely vaccine completion and help normalize the practice across communities.

A second behaviour focused on PHC staff consistently informing caregivers about the next vaccine dose and encouraging them to plan ahead. This small, low-effort behaviour could yield significant benefits by reducing confusion and making follow-up easier, especially when paired with other outreach support.

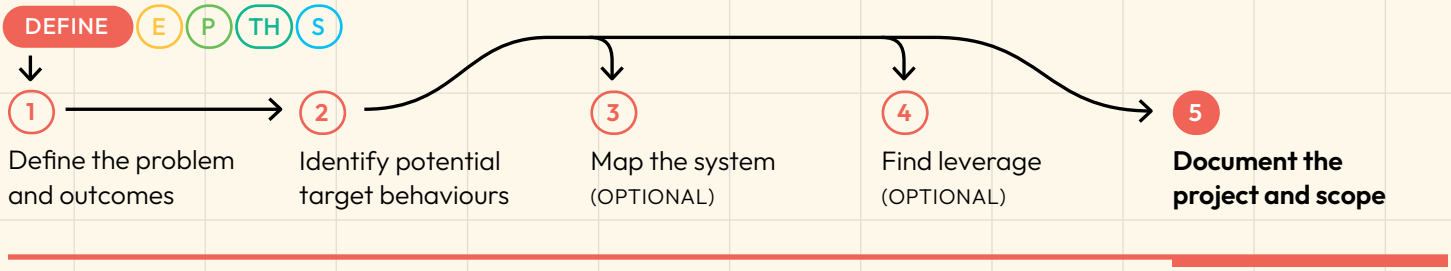
Finally, the team highlighted a third behaviour: outreach workers clearly explaining the vaccine schedule during home visits and building a sense of urgency. This was viewed as a realistic improvement that could be supported through scripts, interpersonal training, or visual tools.

Mapping the leverage points in the system map

After identifying these key behaviours, the project team mapped them back into the broader system to understand their cascading effects. By improving caregiver planning and clarity, the team anticipated a reduction in missed appointments, increased trust in health services, and less strain on outreach and PHC staff. These changes could also create reinforcing feedback loops, such as caregivers gaining confidence and becoming role models in their communities.

To ensure relevance, the project team reviewed their findings with local implementers, outreach workers, and programme staff. This helped ground their leverage points in lived experience and align their strategy with operational realities. Ultimately, the process of identifying and embedding leverage points provided the team with a clearer, evidence-informed path for designing interventions that fit within the system — which had the potential to multiply impact across time.

Of the three behaviours, the team prioritized one: supporting caregivers to build a consistent habit of attending vaccination appointments on time." It was seen as highly impactful, but also realistically achievable with light-touch planning tools and clearer interpersonal messaging. It directly addressed one of the most immediate and widespread breakdowns in the vaccination journey, and aligned closely with the team's goal of improving timely vaccine completion among un- or under-vaccinated children.



STEP 5:

Document the project and scope

In this step:

This step describes how to complete the Project Canvas. This tool brings together all core project elements: outcome, target behaviour(s), stakeholders, scope, risks, early actions and next steps — into a single tool that anchors the project through DEPTHS.

Associated tools:

- Project Canvas

Why it matters:

The **Project Canvas** clarifies direction, aligns expectations, and surfaces any final assumptions or gaps. Without this step, teams often move forward with subtly different interpretations of what the project is aiming to achieve, leading to future misalignment.

This section also serves as the final checkpoint before moving into the second phase, Explore and Diagnose. Where possible, get input on the project canvas from the core team and key stakeholders which will strengthen buy-in, save time, and avoid any later confusion.

How to do it:

1. Build the project canvas

Find the Project Canvas worksheet in the toolkit.

a. Start by adding the project overview. List the project title, locations and description.

b. List the stakeholders. This includes those identified in Step 1.

- **Manage = Closely Involve.** These are key actors who are both influential and actively engaged. They should be closely involved in planning and decision-making.
- **Satisfy = Keep Engaged.** These stakeholders are influential, but they may not be actively engaged. Keep them informed and satisfied and find ways to maintain their support.
- **Inform = Consult and inform.** These actors care about the issue but have limited influence. Keep them informed and consult them for insights, especially those with lived experience.
- **Monitor = Track for later.** These groups may not be central to the current work, but they could become more relevant later. Keep an eye on their level of interest and influence over time.

c. Write down what's in and out of scope for the project. Include the DEPTHS phases involved, as well as the specific deliverables, such as research reports or prototypes. Each DEPTHS stage matters. Skipping steps, like moving ahead without diagnosing root causes or testing interventions, can lead to weak or ineffective outcomes. Occasionally, some phases can be adapted or condensed and shorten the process. Condense and adapt:

- The Define phase if the SMART outcome and audiences are already agreed on by partners in the last 6 months and grounded in recent programme data, skipping the Define phase could be possible.
- The Explore and Diagnose phase if there is already existing strong, recent, local evidence on the same behaviour and population, with clear behavioural drivers have been identified.
- The Prototype Designs phase if the scope is adapting a proven pattern that has already been used in very similar contexts.
- The Test Hypotheses phase if there are very low-risks of change or that only small operational tweaks with limited exposure are needed.
- The Scale phase when the prior phases have produced evidence in this context and implementation capacity exists.

d. Add risks, which are the anticipated challenges that may affect the success of the project. Risks may be:

- **Logistical:** such as access to communities during rainy season

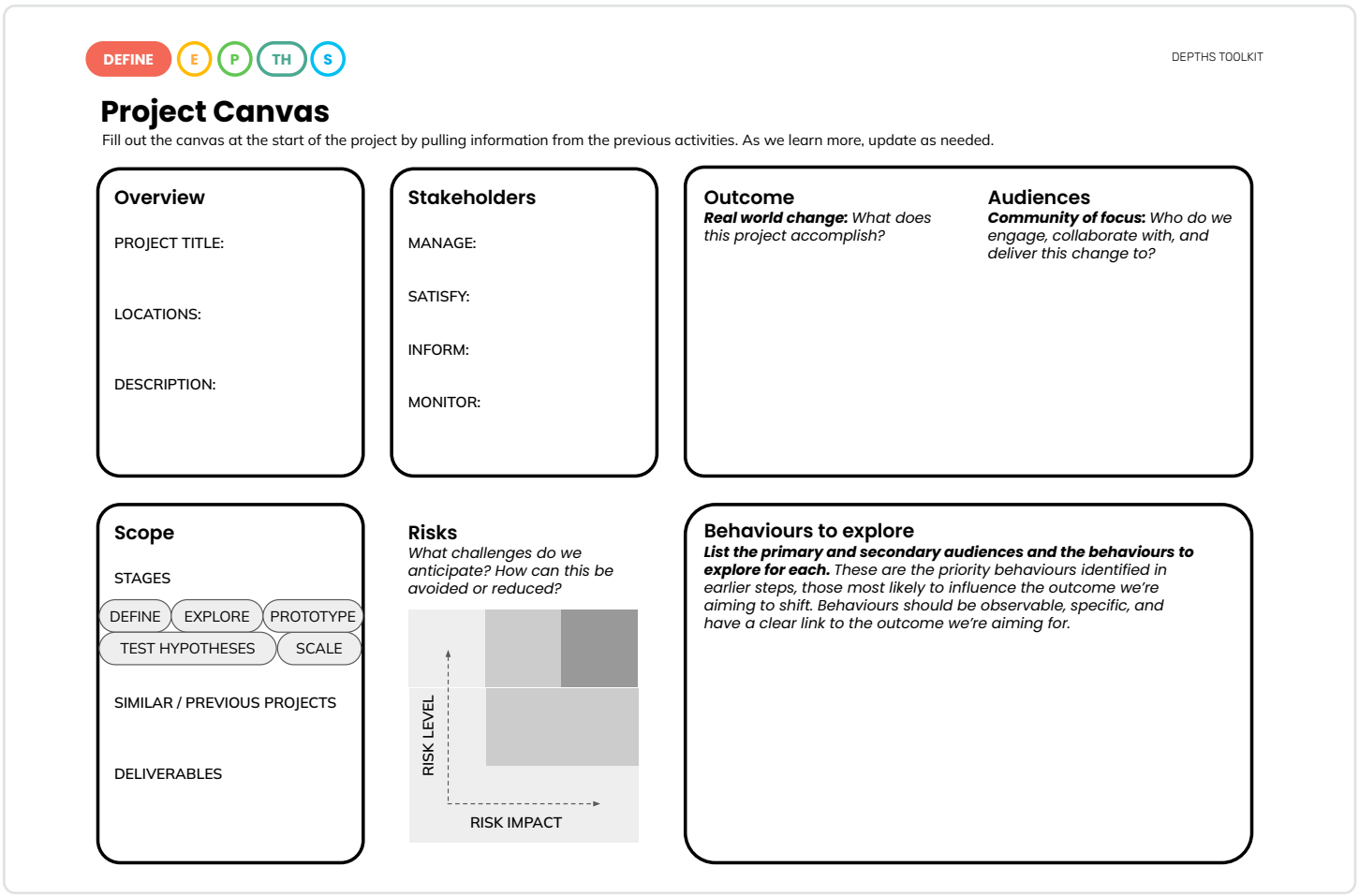
- **Political:** such as government transitions or policy shifts
- **Financial:** such as limited budgets or funding delays
- **Operational:** such as staffing gaps or data security concerns
- **Behavioural:** such as resistance from key stakeholders or social norms

The idea isn't to predict everything, but to think about key issues and, where possible, how to mitigate them.

e. List outcome(s): the real-world change the project is aiming to achieve. Pay special attention to change that impacts people's lives.

f. Add the project's audiences. This is the community or group(s) whose behaviours are the focus of the project's work. In some cases, this may be the group you actively engage or co-create with, such as caregivers or adolescents.

g. Write down the behaviours to explore. This will include priority behaviours identified in earlier steps that are most likely to influence the outcome.



DEFINE E P TH S

DEPTHS TOOLKIT

Project Canvas

Fill out the canvas at the start of the project by pulling information from the previous activities. As we learn more, update as needed.

Overview

PROJECT TITLE:

LOCATIONS:

DESCRIPTION:

Stakeholders

MANAGE:

SATISFY:

INFORM:

MONITOR:

Outcome

Real world change: *What does this project accomplish?*

Audiences

Community of focus: *Who do we engage, collaborate with, and deliver this change to?*

Scope

STAGES

DEFINE | EXPLORE | PROTOTYPE | TEST HYPOTHESES | SCALE

SIMILAR / PREVIOUS PROJECTS

DELIVERABLES

Risks

What challenges do we anticipate? How can this be avoided or reduced?

RISK LEVEL

RISK IMPACT

Behaviours to explore

List the primary and secondary audiences and the behaviours to explore for each. *These are the priority behaviours identified in earlier steps, those most likely to influence the outcome we're aiming to shift. Behaviours should be observable, specific, and have a clear link to the outcome we're aiming for.*

Keep these tips in mind while building the Project Canvas:

- **Consider how different groups will be affected.** In behavioural science, the behaviour of interest will sit at the individual level among the populations we aim to serve. However, if the change places too much burden on already marginalized groups, pause and reconsider. Go back to the Behaviour Tree or System Map to see if the responsibility could be shared more equitably through systems, services, or norms. If so, pause. Revisit the Behaviour Tree or System Map and reconsider selected leverage points, key actors, and priority behaviours.
- **Consider both individual and communal dynamics.** Identify the behaviours of multiple actors, institutions, service providers, community groups, or families. This helps to uncover bottlenecks and find possibilities for system-wide change.

2. Expand the team

After an initial assessment of the problem and a clearer understanding of the context, it might be necessary to recruit new members for the project team. Identify any skill gaps and roles needed, and look for additional team members that could cover those gaps, ensuring the team is well positioned to carry the project through the next phases.

Throughout DEPTHS, three core technical areas are woven together: behavioural science, human-centred design, and systems thinking.The team doesn't need to have deep expertise in each of these three areas, but having some experience or familiarity with each will improve the ability to move through the process effectively. In some cases, different phases of DEPTHS may be led by different teams: a research team may handle the 'DEP' side, while an implementation team handles the 'THS' side. As such, it's important to clarify which steps of the DEPTHS process the current project will cover, and if different teams are involved, ensure handovers are well managed.

The backgrounds and experiences of the team members are equally important and valuable. Including local stakeholders and members of the target community, either directly on the team or through an advisory board, helps to ensure that the work is grounded in a real-world context, and truly reflects the voices of those most affected.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

The Project Canvas shown here is a recreated example based on real project data, used to illustrate what a completed tool could look like in practice.

At this stage of the project, the team had developed an outcome statement, a behaviour tree, a prioritization matrix, a system map, and a leverage point analysis. Based on these steps, they decided to prioritize changing caregivers' behaviour: to support caregivers in building a consistent habit of completing their children's vaccinations on time. The aim was to reduce delays and drop-offs in routine childhood immunizations among refugee and host community households identified as un- or under-vaccinated.

Overview

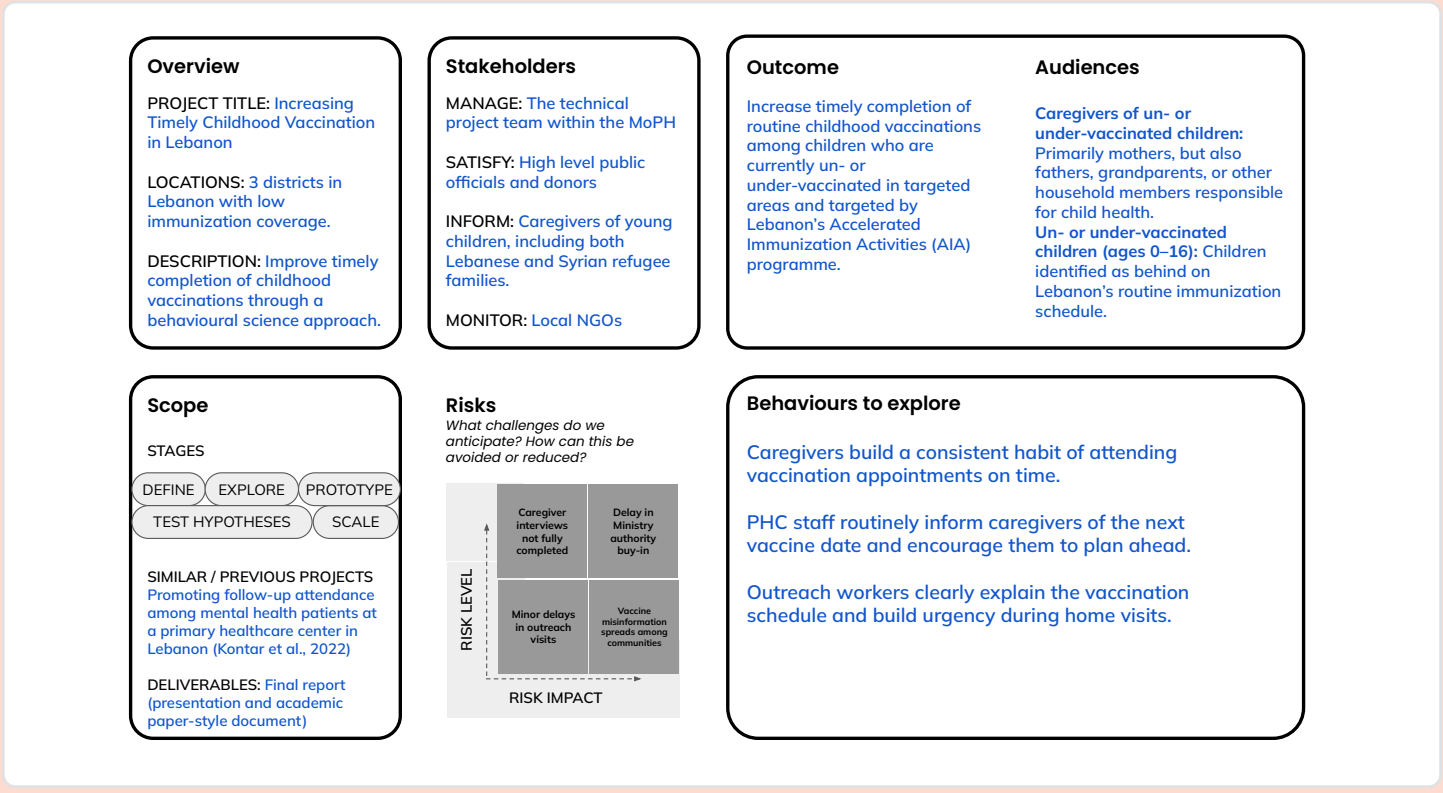
The canvas included the project title, geographic scope (three districts in Lebanon), and population focus (un- or under-vaccinated children aged 0–16 years). Key institutional stakeholders included the Lebanese Ministry of Public Health (MoPH), UNICEF, and affiliated outreach teams conducting household visits. Anticipated risks ranged from caregiver mistrust in the health system to logistical challenges in sustaining household follow-up.

Outcome

The outcome statement centred on increasing timely completion of routine childhood vaccinations among un- or under-vaccinated children.

Community of focus

The primary agents of change were caregivers — in particular, mothers and fathers in refugee and low-income host communities. These were the individuals most directly involved in vaccination decisions. System mapping confirmed they were the audience with behaviour that was the most impactful and the most feasible to influence. Outreach workers and PHC staff were also seen as key players in the system, but their behaviours were deprioritised at this stage, in favour of focusing on caregiver action.



Actors and actions

Through the Behaviour Tree and Leverage Point Analysis, the team identified three main behaviours contributing to vaccination delays, with one chosen as the top priority. The central behaviour was as follows: caregivers forming a clear and timely vaccination plan, following through on appointments, and avoiding unnecessary delays.

Risks

As the project team prepared to move into the next phase, they identified several key risks.

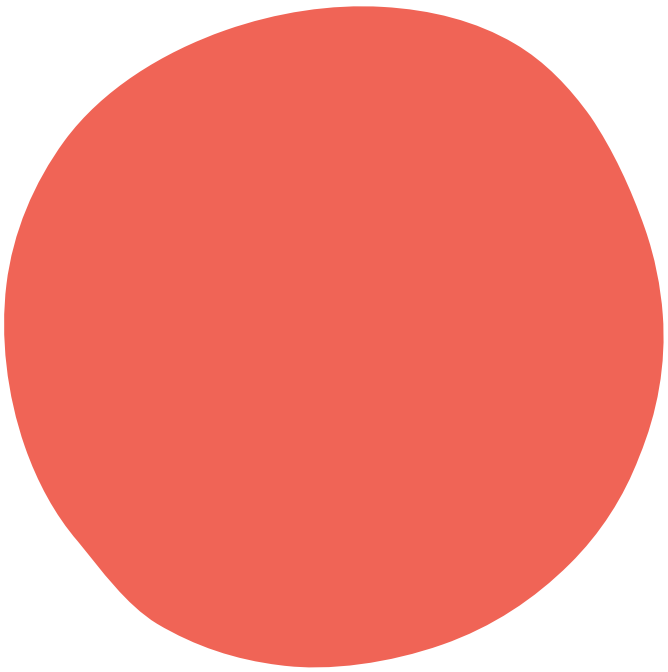
- The most critical – high risk and high impact – was a potential delay in securing buy-in from Ministry authorities, which could stall implementation or limit institutional support.
- A second concern, with high risk but lower impact, was that some caregiver interviews might remain incomplete, affecting data comprehensiveness but not derailing the project.
- Among lower-probability risks, vaccine misinformation spreading within communities was flagged as low risk but high impact, given its potential to undermine trust and uptake.
- Lastly, minor delays in outreach visits were considered low risk and low impact, and likely manageable through scheduling adjustments.

Final checklist for *Define*

- [ ] Problem Definition and Outcome Statement
- [ ] Stakeholder and Audience Map
- [ ] Behaviour Tree
- [ ] Prioritization Matrix
- [ ] Project Canvas

Optional:

- [ ] System Map
- [ ] Leverage Points



Learn more

This field guide is designed to equip teams with practical tools, frameworks and methodologies to apply behavioural science to a range of real-world challenges. As behavioural science draws from multiple disciplines — including human-centred design, experimental economics, and systems thinking — we've curated a selection of approaches that reflect this diversity. The following section offers additional resources to explore specific topics introduced in the guide, along with the option to continue a self-paced learning journey.

"I want to learn more about human-centred design and how to co-create with my community."

There are many valuable resources available to help meaningfully engage with communities and tap into local expertise. If looking to involve community members in identifying and prioritizing solutions, the field of human-centred design (HCD) offers helpful starting points. Within UNICEF, you can explore the SBC Guidance for HCD and the HCD Field Guide, both tailored to support practitioners working in diverse settings.

Curious to learn more from outside sources? Consider IDEO's Field Guide to Human-Centred Design. As one of the pioneers in formalizing HCD practices, IDEO offers accessible, practical guidance drawn from years of experience co-creating solutions around the world.

"I want to explore additional case studies."

Beginning this journey in-house is always a great option. UNICEF has an extensive variety of publications and research, as well as tools designed to support children across its five core programmatic areas. If interested in exploring how behavioural science is applied beyond UNICEF, there are many other organizations doing impactful work in this space.

Organizations that regularly share their insights and methods include Common Thread, Busara, FirstHand, the Behavioural Insights Team, Ideas42, J-PAL, the World Bank's eMBeD, and the Inter-American Development Bank, among others. Reviewing their work can offer fresh perspectives and practical examples to enrich an applied behavioural science approach.

"I want to learn more about systems thinking and mapping."

One of the best resources to learn more is the open access book Systems Mapping, which provides an excellent non-technical summary of seven different approaches.

In particular, the approach here builds on the standard technique of causal loop diagrams, with a focus on behavioural factors. A good guide to causal loop diagrams can be found here.

Another excellent resource comes from the System Mapping Academy's online materials, including a free Toolkit. For approaches that are particularly useful for applied behavioural science, see UCL's behavioural system mapping and Busara's behavioural systems analysis. This online summary provides links to many other resources.

"I want to learn more about how to find good leverage points that might have significant ripple effects."

For further insights into ripple effects and leverage points, the scientist, writer, and educator Donella Meadows gave a celebrated and highly-cited talk on systems thinking. Meadows' talk concerns the multiple levels to employ while considering systems change, including changes in the underlying function or purpose of a system.

Resources

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