European Commission

Evaluation in Hard-to-Reach Areas

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Around 2 billion people, or half of the world's poor, live in fragile or conflict-affected states (FCAS). Their number has been steadily rising. The EU and its Member States pay particular attention to these vulnerable areas. In 2016, the EU spent €4,970 billion in development cooperation with FCAS, 52.8% of DG DEVCO's total commitments.

It is especially problematic to evaluate the results of development cooperation in FCAS and – more widely – in Hard-to Reach-Areas (HRA) by using traditional techniques because of the difficulties in accessing these areas. This paper presents a brief overview of innovative technologies to overcome these obstacles. It is based on lessons learned from a series of conferences held by DG DEVCO's Evaluation Support Service in 2019, where different donors and evaluators presented their experiences of carrying out evaluations in HRAs as well as the advantages provided by the use of innovative methods and approaches, and the challenges that exist in applying them.

This paper is addressed to evaluation managers in the EU Delegations and in DEVCO headquarters, as well as partners and professional evaluators in the development field. It may also provide useful insights to colleagues from other Commission DGs and services.

A hard-to-reach area (HRA) is an area that is difficult to access due to conflict, man-made or natural disasters, or other physical, logistical, security or health-related obstacles; this definition also includes FCAS.

Are you a DEVCO staff member planning an evaluation in a hard-to-reach area? The Evaluation Support Service is here to help you. Please contact us at: **helpdesk@evaluationsupport.eu**

Conflict Sensitivity

When conducting evaluations in HRAs it is important to be conscious of how major constraints (such as security and difficulty of access) affect the strength and validity of data. To mitigate these constraints, you can use multiple qualitative and quantitative evaluation methods and adopt a robust triangulation approach. Their use, however, is subject to ethical considerations, particularly in conflict-affected areas.

Outside interventions can affect the dynamics of a conflict. Aid provided to HRAs, which tend to be relatively dependent on outside support, inevitably affects the drivers of political, social and economic conflict. Interventions can affect the distribution of resources, which can have an impact on the balance of power in the area, strengthening certain groups over others.

How aid is distributed matters. Fragile balances in conflict situations can be easily upset. Aid distribution methods can have both positive and negative impacts on a conflict, depending on how interventions are carried out.

IMPACT OF AID

MATERIAL	Market	The influx of goods can affect prices of essential supplies.
	Distribution	Distribution of goods, money, or services along political or ethnic fault lines can exacerbate conflicts.
	Substitution	Current players are priced out of the market.
	Legitimisation	Aid can strengthen the power & prestige of certain groups.
	Theft/corruption	Resources & services do not always reach the intended beneficiaries.
ETHICAL	Procedures	What examples are we setting to the affected community & beneficiaries?
	Accountability systems	Are we reinforcing or undermining them?
	Transparency	Are we explaining what our goals are and how we aim to reach them?
	Partnerships	Are we sending unintentional messages based on whom we contract and partner with?

What is Conflict?

Conflict occurs when people have -or believe they have- incompatible goals and interests. It is a natural part of change in any society. As such, it is not necessarily negative and may result in positive change. Conflict is negative when violence is used to manage (perceived) incompatible goals and interests. Violent conflicts often revolve around competition for power or resources.

What is Conflict Sensitivity?

Conflict sensitivity is a deliberate and systematic practice that ensures processes and actions minimise negative and maximise positive effects within a given context. It is based on awareness of the interaction between these processes and actions and the particular context. Therefore, an organisation needs to understand the environment in which it is operating, particularly if intergroup tensions and divisive issues exist, and if there are positive factors that can mitigate conflict and strengthen social cohesion[1].

'Do no harm' & conflict sensitivity: issues perceived to be minor can have major consequences

1 the definition of Conflict Sensitivity is based on the work of Swisspeace (**https://www.swisspeace.ch**/)

In short, conflict sensitivity is understood as the ability to:

- Understand the context in which one operates (conflict analysis).
- Understand the interaction between intervention and context (conflict sensitivity analysis).
- Deliberately and systematically act upon this understanding in order to minimise negative impacts and maximise positive impacts on conflict (conflict sensitivity adaptation).

In other words, conflict sensitivity goes beyond 'merely' doing no harm, ensuring aid does not cause any unintended harm and has a positive impact.

Key point: things to remember when evaluating in FCAS

- Include evaluation questions relating to conflict sensitivity.
- Adopt flexible methods that allow evaluators to spot and report on unintended consequences.
- Ensure data collection & stakeholder engagement is carried out in a manner that is sensitive to conflict.
- Continuously acknowledge one's impact and understanding of the context.
- Be flexible and adaptable to changing conditions.

Monitoring & Evaluation

Monitoring and evaluation can determine how accurately an initial conflict analysis is reflected in programming. In complex settings where a transition towards peace or renewed violence is often unpredictable, establishing a theory of change is a major challenge. The initial intervention logic can quickly turn outdated, the validity of the initial assumptions is to be reassessed and programming adapted to the changing

conditions. This requires flexibility and humility in project design and implementation. Baseline and monitoring data, including information on implementation, is often lacking, which makes interventions in conflict-affected areas particularly difficult to evaluate. In terms of carrying out an evaluation, security issues often prevent access, further negatively affecting the quality of data collection.

Key point: tailoring indicators

Indicators should be tailored to each project. Ideally there should be a mix of objective indicators (e.g. incidents of violence), process indicators (e.g. regular conflict analysis and project adaptation) and perception-based indicators (e.g. a respondent feels more or less safe). Disaggregation of data on indicators by group can also help to detect any concerns over conflict sensitivity.

Key point: monitoring and evaluation (M&E) processes must themselves be conflict sensitive

- Transparency and the creation of safe spaces can reduce tension and suspicion among the community, encourage open dialogue and the sharing of potentially sensitive information with evaluators.
- It is important to consider whom to partner with to conduct the evaluation, and how this partner is perceived by respondents. Are respondents drawn from diverse groups?
- It is also important to ensure that M&E outcomes are communicated back to relevant communities.
- Understanding intersectionality is a core component of a conflict-sensitive approach. Different people see conflict differently. Gender, national identity, racial identity, sexuality, disability: identities are intersectional. Nobody is 'one thing'. Conflict impacts everyone differently.
- Protection: potential interlocutors have the right not to participate.

CONFLICT SENSITIVITY IN PRACTICE

Actions	Definitions	Conflict insensitive examples	Conflict sensitive examples
Distribution	Distribution of resources, information, services, water, etc. along existing fault lines	Providing support only to IDPs or refugees and overlooking the host community	Recognising that host community vulnerability has increased with the IDP/refugee influx, and supporting the host community as well
Legitimization effects	Giving legitimacy to a group or leader by working with them	Using a beneficiary list from a tribal or political leader or security forces instead of using neutral and transparent selection criteria	Cross-checking distribution lists from different leaders to maintain equal representation
Market effects	Changing local markets with influx of outside resources	Changing local markets with influx of outside resources	Using or building local markets to benefit from resources and labour demands of Internally Displaced People and refugees
Substitution	Replacing existing functioning structures or systems	Replacing existing functioning structures or systems	Working with community water and sanitation authorities to improve basic services to benefit IDPs and host community
Theft/diversion	Fuelling conflict or division with stolen/diverted resources	Portions of distributed resources provided to security forces or tribal leaders as 'compensation' for assistance	Maintaining clear distribution policies, including tracking of resources, complaint mechanisms, and inventories

Table inspired by CDA's Conflict-Sensitivity and Do No Harm framework (**www.cdacollaborative.org/what-we-do/conflict-sensitivity/**)

CASE STUDY

Participatory Impact Assessment of FAO's distribution of emergency livelihood kits in South Sudan

The project to be evaluated

FAO distribution of emergency kits in South Sudan aimed at supporting food insecure communities who have been severely affected by the conflict that broke out in December 2013, which has led to more than 1.3 million people fleeing their homes. The kits include crop and vegetable seeds, farming tools, fishing kits and animal health kits.

The challenge

Access to several of the intervention areas was impossible to foreign evaluators due to several logistic and security-related reasons.

The innovative approach

The evaluation made use of different evaluation methods and tools; among them, the participatory rapid appraisal (PRA), which was administered by local enumerators.

PRA is a range of qualitative tools that consist mostly of visual exercises like community mapping and timelines to capture the history of a conflict in a particular community and the timing of development projects or humanitarian assistance (for example, changes in access to livelihoods and income expenditure). The PRA allows furthermore to explore the relationships between different stakeholders, to identify key parties and dynamics and to represent them in Venn diagrams. Finally, it allowed developing household economy matrix to understand incomes, expenditure and impact of livelihood kits, and household coping strategies.

An important aspect of PRA is the involvement of the beneficiaries, thus closing the feedback loop — sharing the results of analyses between evaluators and community members through visual means, public presentations, and discussions.

The technique works best with a relatively homogenous group of people, and includes semi-structured interviews. While ideally every evaluation should be based on the existence of baseline data, an added bonus of PRA is that these exercises can be done without baseline data.

Given the volatile nature of protracted crises, complex war economies, intra-state violence, and divisions across ethnic lines, it is crucial to repeat the conflict sensitivity analysis at regular intervals and tailor approaches accordingly. This has to become part of the projectcycle management process: design, implementation, monitoring and evaluation. Only then can the interaction between your engagement and the local context become clear. Adaptability is key. The situation in HRAs can change on a daily basis. Evaluators need to be prepared to adapt their methodology. Overall, a small amount of good quality data is better than a large amount of data of lesser quality. You cannot always get what you want. One has to make do and adjust according to the circumstances.

Preparation

Planning

Preparation is paramount. You must always adapt the prepared methodology to changing circumstances. Stay creative and flexible and adapt your tools to the environment.

When in doubt about the feasibility of an evaluation, carry out an evaluability assessment. Remember to:

- Determine the requirements of team members.
- Involve national staff with appropriate skills.
- Design evaluation approaches and methods.
- Consider ethical issues.
- Assess need for using specific technical tools.

Evaluability Assessment

An evaluability assessment is used to assess the feasibility of gathering evidence, including through consulting with the people affected. If such an assessment is not possible, you may need to consider alternatives, such as a reflective learning workshop with project staff, peer learning across agencies, or a more limited semi-evaluative activity. The following are key questions:

- What are the main risks that the evaluation faces e.g. operational, financial, protection?
- How do these risks affect the evaluators' ability to reach the affected population?
- What secondary and other data are available to the evaluators if they cannot gain access to the affected population?
- What other options are available to the evaluators to gain access to the affected population?
- How will limited access, for example to only one side of a conflict, affect the credibility of the evaluation?

Include both the local community and interviewees in the process so people know why the data is being collected. Be aware of different levels of access and inclusion, especially when using ICT tools (see below); marginalised members of a community or group may be left out if the evaluation is not designed with inclusion in mind. To strengthen inclusion and participation, find, vet, and if necessary, build capacity of local partners.

Vetting local partners

Always take the following points into account:

- Their relationships and interests with local authorities, the local economic fabric and businesses.
- Are they subject to specific pressure or harassment?
- What security issues do they face?
- Mitigate for bias through triangulation with other data sources.

Training local partners

Training is essential, but it comes at a cost. Adjust your expectations and training to the level of knowledge and experience of the local partners. If you are planning an evaluation in a HRA, your Terms of Reference should include the provision for resources and a sufficient budget. Data collection to evaluate projects often requires a team of local data collectors or enumerators. Typically, they are social researchers, surveyors or university students (not necessarily evaluators) that can access local populations and areas that foreigners find difficult to access.

Typical issues covered in training of local researchers/enumerators and their coordinators include:

- Ethical issues.
- Security, logistics and planning.
- Evaluation objectives, expected outputs, and selected methodologies.

Enumerators or survey personnel are charged with interviewing and assisting respondents in answering questions and completing survey questionnaires, using digital or paper collection methods designed to capture information around a research or evaluation question.

- Information/data collection principles and relevant techniques, including conflict sensitive data collection, if relevant.
- The administering of questionnaires to beneficiaries, presentation, testing (role -playing).
- Attitude towards target interviewees.
- Use of mobile devices (if relevant).

Security

Access to HRAs means access to people

It is crucial to properly balance the effort needed to reach people in HRAs. The risk to individual beneficiaries, stakeholders, enumerators, and evaluators should be weighed carefully against the added value of the information sought. You need to ask certain questions such as: Where are we in the project cycle? Is the effort worth it in terms of accountability? To make a correct calculation, you must first analyse your level of access and identify the risks. Much depends on the level of security available and knowledge of the field. Trust is at the core of any effort to reach people in HRAs

Key point: preparation

Violent conflict is a major obstacle to development. Thorough risk-management reduces the risk of having to terminate an evaluation due to violence or instability, and reduces risk to staff and beneficiaries. There has been a big move toward professionalisation in the humanitarian sphere, partly thanks to resources like the ALNAP (Active Learning Network for Accountability and Performance) Evaluation of Humanitarian Action Guide, which supports evaluation specialists and non-specialists at every stage of an evaluation, from initial decision to final dissemination. Several of the key principles discussed in the ALNAP guide can be applied also to the development cooperation field.

and gain useful information. How can you gain the trust of people affected by conflict if you show up with a military convoy with soldiers and other outsiders?

Evaluation in HRAs requires:

- A security assessment of the local context where the evaluation will take place.
- In a situation of violence or conflict, a precise conflict analysis to understand the drivers of conflict and their evolution.
- Specific security and protection measures.
- Anticipation of logistic, administrative and implementation constraints.

Conflict analysis findings should be disseminated as widely as possible among staff working in a specific situation, as it allows each member to be aware of the context and their influence upon it.

Key point: adapt your methodology to an environment with limited access

Key questions:

- Is it neeeded and worth it (benefit versus risk)?
- Is it feasible?
- Will the collected information be relevant? What are the limitations?

Keep in mind:

- Invite and interview key local informants in a safe environment or location to discuss the objective of the evaluation and the methodology, using a range of qualitative methods, including participatory rapid appraisal (PRA).
- Be conscious of and try to minimise possible bias (e.g. gender or power-based).
- Communication: explain to the community what you are doing. How visible are you? People retain the right not to participate.
- Sampling: iterative information collection over longer period.
- Flexibility is key: HRAs are rife with unforeseen circumstances:
  - Have a team that is totally dedicated to consulting the affected population.
  - Plan adequate training to pilot the methods.
  - Build in an iterative process of analysis, and ensure teams are regularly providing feedback to each other and to the coordinator during the fieldwork.
  - All of the above may require longer periods in the field than in most evaluations.

- Identification of a local evaluation partner.
- Exploring and using complementary techniques for data triangulation.

Conflict analysis

To establish the level risk in a conflict setting, one needs to establish:

- Conflict characteristics.
- Conflict causes and triggers who are the parties to the conflict (dividers/spoilers & connectors/stabilisers).
- Conflict dynamics (trends & opportunity to intervene in a situation).

You can do a lot yourself. The Internet is your best friend to find trusted sources, but always triangulate your findings and talk to others with field expertise in HRA.

CASE STUDY

Evaluation of IFAD's Agricultural Support Project in Georgia, carried out between 2010 and 2015

The intervention to be evaluated

An intervention financing (among others) the building and rehabilitation of irrigation canals. The expected result was the increase in household income of local farmers, thanks to the higher production facilitated by a more direct access to water.

The challenge

An intervention area was situated along the border with South Ossetia, where access was limited at the time of the evaluation because of the Russian military intervention in the area.

The innovative approach

The evaluation included an extensive use of geospatial data, which allowed a comparison of the situation before/after the project intervention. This was done thanks to time-series images used to compute the normalised difference vegetation index (NDVI) to compare changes in vegetation cover between farm plots around the canal (the treatment group) and others selected as comparison group. The control area was identified by using multivariate matching with genetic weighting, an econometric process allowing to create 'statistical twins' allowing for the identification and statistical attribution of the intervention results[1].

The findings from the use of geospatial data were triangulated with household surveys conducted by local enumerators; the two methods concurred in revealing that the production increase did not result in an increase of pro-capita income.

1 See page 13 for more details

Tools

Use of Geospatial Data

Geospatial technology can gather, show, and analyse imagery, GPS data, metadata, remote sensing, and historical data of certain geographical areas to identify outcomes and impact. Orbiting satellites can probe not only socioeconomic and environmental data, but also evidence related to land use, for example build-up of infrastructure (e.g. number of tents in a refugee camp, roads, irrigation canals). They can also assess different wavelengths emitted from the Earth's surface to measure changes in vegetation, drought (risk of famine), or flooding. High-performance platforms have made it possible to interpret large and complex datasets on a planetary scale. Satellite data helps not only in analysing outputs (build-up of infrastructure), but also medium and long-term results of a relevant project. However, there are still some limitations, as the use of satellite data in several fields is not well established yet.

Geospatial data can help answer basic evaluation questions

- Relevance: helps to answer the following questions: Where are we operating? Are we operating in the most relevant place? Are we doing the right thing?
- Effectiveness and impact: helps to answer the question 'are we doing things right?' Maps programme outcomes and impacts, attribution and drivers. The prior assigning of a precise geo-tag to the project sites is required; this is much easier when done from the outset, which is now mandatory in many organisations.
- Sustainability: by enabling continuous programme and project monitoring it helps to answer the question 'what happens after we leave?

Use cases

- Straightforward uses: land management, environmental impact, etc.
- Building up missing baseline data; satellite data is available in time series, allowing you to see changes over time, and comparing them with the situation prior to the project.

REMOTE SENSING

Benefits	Challenges
■ Requires no physical access ■ Provides unique complementary data ■ Visible impact can be compared over time/ scale ■ One image = many applications	■ Until a few years ago, the resolution of free satellite data was 250 metres. Today up to 10 metres is available free of charge. Higher resolutions are commercially available, but their cost is prohibitive. ■ Host state, local communities and armed groups may object to their use. ■ High-resolution commercial data might reveal location of vulnerable groups. ■ At a 10 metres per pixel resolution, individuals or groups cannot be seen, only villages or camps. ■ Information requires verification/confirmation.

Key point: Preparation

- Set out what you want to do: why and how will you integrate satellite data into your evaluation?
- Add geo-location tags to intervention areas, if this was not done at the project start. Only with accurate geo-tagging can you cross-reference an intervention area with other data, compared to non-project areas.
- Identify suitable partners/partner organisations, form collaborative arrangements to leverage open data and tools.
- For a successful mixed-method multidisciplinary approach 'regular' evaluators need to keep up with the technology experts, and vice-versa, to develop a common language.

- Complementing/triangulating existing data garnered through 'classical' tools; for instance, geospatial mapping of agricultural areas combined with a household survey.
- When certain areas are off-limits, for instance, in a conflict situation.
- Outcome analysis, which requires development of sound assumptions.
- Less straightforward/experimental uses, like mapping violent extremism.

Opportunities

- Ability to gather evidence on hard-to-access or dangerous areas.
- Better identification of control groups.
- Better BACI (before-after-control-impact) identification.
- Cost-effectiveness: public data are free, while processing expertise and time requires a careful planning of resources.
- Applicability in a wide variety of contexts.

Challenges

- The initial cost for setting up and acquiring (in-house) expertise can be substantial, although the services provided by Copernicus can lower these costs considerably.
- Limited overall knowledge and few guides on its use for humanitarian or development evaluation purposes.
- Still dependent on field-based personnel to test the assumptions, provide precise coordinates of the intervention zones, validate findings, and support analysis.
- Data fragmentation.
- High-resolution imagery requires heavy storage and computing capability.

Not a panacea

It has been difficult to expand the use of geospatial tools from biodiversity conservation, land degradation, sustainable use of natural resources, and disaster risk management to more complex sociological, economic, or political assessments. Satellite data provides a sound evidence base but cannot replace more 'traditional' evaluation

techniques. Evaluators need to work in multidisciplinary teams to triangulate and validate findings and to understand the facilitating and disabling factors of results. Remote sensing can readily show what happened. Analysing why it happened requires specialised analysis; the use of satellite imagery in evaluation has to be integrated with the use of qualitative techniques for a sound contribution analysis.

Statistic-based construction of control groups

In cases where a randomised control trial is ethically or technically not feasible, a control group is constructed statistically instead. Matching is an econometric procedure that uses statistical characteristics that are associated with the intervention and correlated to the intervention's outcome. It creates 'statistical twins' that allow for the identification and statistical attribution of the intervention results.

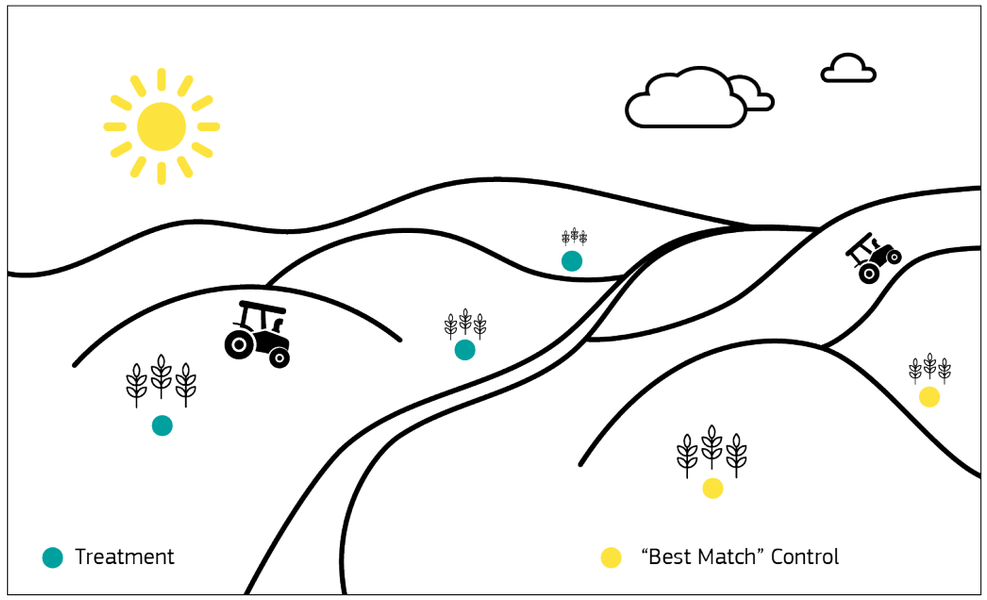

Figure 1: Multivariate matching (see case study on page 10).

Copernicus

Copernicus is the EU's earth observation and monitoring system, which aims to provide full, free, open and easy access to its Copernicus Sentinel data and global information from its six thematic services (land, marine, atmosphere, climate change, emergency, security). For those who work in development as well as evaluators in HRAs, Copernicus provides free baseline data and information. The Copernicus emergency management service provides essential support in complex development settings through its 'rapid-making capability'. Copernicus provides both optical satellite data as well as all-weather, day and night radar imagery, even if there is cloud cover. In addition, its 'mosaic' technology can stitch together partial cloudless photos taken in a set time frame to form one comprehensive, cloudless image.

Remotely Administered Surveys

Different kinds of remotely administered mobile-based solutions offer a convenient way to reach stakeholders without being exposed to potentially risky situations arising from armed conflict, natural disasters, or other obstacles preventing access to areas. While there is much talk of artificial intelligence, robots, block-chain, social media monitoring and smart phones, simple solutions are often the easiest to implement. Mobile phones and SMS are arguably still the most widespread technology available. From simple SMS-based surveys and regular phone interviews, to direct messaging, voice-mail, interviews done by call centres, or even monitoring of social media platforms, each technique has its benefits and challenges. Therefore, information acquired can complement existing data garnered through 'classical' means, improve overall data collection efficiency, or in some cases offer the only path to reaching interviewees. The evaluator has to assess which particular technique best suits the circumstances of their evaluation. As with all evaluations, preparation is

key. Phone-based surveys must be well prepared, for instance, in order to identify the phone numbers of the target individuals and ensure they participate.

Opportunities:

- Use of phone-based surveys in evaluations has been inherited from the monitoring field, where the technique has the further advantage of informing the need for almost real-time adjustments.
- Mobile phones are widespread, easy to use, cheap, and versatile.
- Improved efficiency through the direct input of data instead of first imputing the data on paper, then copying it.
- Devices and software are inexpensive.
- Phone-based data is technically easy to process.
- Direct contact with affected people in areas that cannot be physically accessed.
- There is plenty of inexpensive off-the-shelf software that enables handheld devices to be used when administering qualitative surveys and semi-automatic data processing.

Challenges

- Privacy risks: sensitive data might fall into the wrong hands. Data anonymisation is imperative, irrespective of the support used.
- Risk of bias: mobile phones are widely used but not in all communities.
- Gender dimension: In some communities, women do not have access to mobile

COMPARISON OF SURVEY TYPES

Survey Type	Benefits	Challenges
SMS-based questionnaires	Very simple to implement. Work on any type of phone Allow for mainly closed-ended questions Correspondents can provide direct input when it is most convenient or safe, whereas scheduling focus groups or interviews can be time-consuming or impossible.	Only enable short questions and answers. Potential literacy bias. Limited use for typical qualitative surveys.
Chat- or messaging-based surveys	Viable (and free) alternative. Allow for open-ended questions.	Requires interviewees to own a smartphone Potential literacy bias
Voice-recorded messages	Enable more complex questions, and even illiterate people can participate	More expensive
Call-centre interviews	Complementary method to inform a survey, gather and analyse reactions to an event, etc.	Most expensive solution.
Social platform monitoring	Complementary method to inform a survey, gather and analyse reactions to an event, etc.	Many people do not have internet access.

phones.

- Risk of overreliance on digital tools and quantitative evaluation methods.
- Trust issues: avoid using a (foreign) number as that can be perceived as suspicious.
- Remote tools can be quite impersonal. Many people prefer human interaction.
- Need for verification and follow-up.

Key point: Preparation

- Analyse the privacy policies of mobile service providers, government data collection and storage regulations, as well as national regulations on data collection and storage (see EU GDPR legislation). Personal information should not be collected, unless strictly vital. In this case, it must be anonymised during collection. Make sure your device has appropriate security and privacy features.
- Train enumerators on how to engage with respondents, interact with your digital platforms, deal with potential language issues and seek assistance when required. Include gender and conflict sensitivity in the training.
- Back-up solutions are important: if someone does not want their information registered on a machine, make sure you can revert to paper if needed.

Face-to-Face Surveys Using Mobile Devices

Technological tools can also be used on the ground by local surveyors/enumerators. Using different kinds of handheld devices, from smartphones to tablets, with or without GPS-tracking, offers numerous advantages to time-tested means of registering feedback like paper surveys. Of course, every tool has its drawbacks, which has to be taken into account when planning for their use. A thorough analysis of the context will inform the evaluator as to which tool is best. Throughout, conflict sensitivity should be considered: the more the tool is visible, the less its use is advisable in areas affected by violence or conflict, as it makes visible both the interviewer and the interviewee. In some cases, paper-based surveys are the only option; in extreme cases, even these entail risk.

Advantages

- Can be administered by local, non-specialised enumerators in the field, face-to-face.
- Specialised software allows for offline data entry and online transmission afterwards.
- Handheld devices and software are cheap.
- Data collection is fast; more efficient than inputting data on paper first, then copying it to a computer.
- (Semi-) automatic data processing (depending on the type of survey).
- Data can be automatically and rapidly transmitted to the server.
- Post-collection processing is largely automatic, fast, reliable, but requires checks.
- Handheld devices can be reused: a one-off investment that can be carried over to other evaluations.
- Allows for a large amount of data to be gathered, including multi-media.
- Geo-stamping can verify the location of interviewees, improving data quality.
- Electronic surveys can ensure that questions are asked in the correct order and include automatic consistency checks, improving data quality.
- Can improve coordination and cooperation between organisations, specifically in joint evaluations, by means of using common definitions and indicators.
- ICT tools can broaden types and volume of collected data to help overcome sample bias.
- Surveys can be easily adjusted or corrected – mistakes are easily spotted.

Challenges

- Dependent on connectivity and power.
- Geo-localised data can identify at-risk groups or the enumerators themselves.

- Privacy: sensitive data might fall in the wrong hands. Data must be destroyed in case of hostility — easy with handhelds, more difficult with paper forms. Data anonymisation is imperative, irrespective of the support used.
- IT tools encourage closed questions. However, plenty of off-the-shelf software exists for handheld devices to also administer qualitative surveys.
- Requires logistical planning, preparation and training time.
- Privacy concern — do not take pictures with identifiable individuals.

A myriad of useful software options are available to administer, process and visualise survey results like SurveyMonkey, Survey Anyplace, Limesurvey, Typeform, Surveygizmo, Crowdsignal, Sprockler, etc.

Handheld devices and conflict sensitivity

Handheld devices can invite scrutiny and suspicion. These are not to be used in case of security threats, nor in places where such tools are banned or culturally inappropriate. The more the tool is visible, the less its use is advisable in fragile situations; in some cases, paper-based surveys are the only option (in most extreme cases not even paper is appropriate). Some software has a 'panic button', erasing data from the handheld device in case of trouble so that no data is confiscated. Different tools are to be used depending on security conditions. These include:

- tablets
- smartphones
- paper-based tools (to be used when use of handheld devices is not advisable, though there are not exempt from risks in extreme situations). Data collection and data analysis processes are lengthier and resource intensive.

Conduct a **risk assessment** - identify the risk of introducing ICT tools, including domestic violence against women, theft, and harassment from authorities. Understand the nature of the context: how is technology viewed by the community as a whole, or by women and men separately? This applies to remotely administered survey methods using hand-held devices as well.

'Non-Tech' Methods

A large number of non-tech methods

There are many useful tools available to conduct evaluations in HRAs that are not based on technology and can be administered by either skilled evaluators or local facilitators. In the conference cycle, upon which this paper is based, we discussed the analysis of children's drawings and participatory rapid appraisal. However, many more methods exist, which do not require the use of specific technology-based tools.We would like to mention participatory evaluation methods, such as Outcome Mapping, Outcome Harvesting, the various methods based on a story telling approach, like Most Significant Change, the participatory drawing of maps showing features of the project areas, techniques such as community resource mapping, transect mapping, social map, flow diagrams, Venn diagrams, and the draw & write technique.

Participatory rapid appraisal (PRA)

PRA is a range of qualitative tools that consist mostly of visual exercises like community mapping and timelines to capture the history of a conflict in a particular community and the timing of development projects or humanitarian assistance (for example, changes in access to livelihoods and income expenditure).

An important aspect of PRA is closing the feedback loop — sharing the results of analyses between evaluators and community members through visual means, public presentations, and discussions.

The technique works best with a relatively homogenous group of people, and includes semi-structured interviews. While ideally every evaluation should be based on the existence of baseline data, an added bonus of PRA is that these exercises can be done without baseline data. Triangulation through using additional techniques is key to validating findings.

Qualitative participatory methods, using PRA:

- Mapping to understand the development context and issues.
- Timeline to reconstruct baseline and change over time.
- Venn diagrams to explore the relationships (between local and national institutions), to identify key parties and dynamics.
- Household economy matrix to understand incomes, expenditure and impact of livelihood kits, and household coping strategies.
- Involving beneficiaries by using tools that are also suitable for people with no formal education, e.g. proportional piling, which prevents education bias.

Opportunities:

- Can greatly facilitate the evaluation of results in HRAs.
- Enables vulnerable people to share, improve, and analyse their knowledge of life and conditions, as well as to plan and take action on changing their situation (needs assessment, feasibility study).
- Quick process versus longer time needed for 'classical' surveying.

Challenges:

- Less suitable for quantitative data gathering.
- Requires high participation rate of beneficiary groups: groups that are too small can lead to generalisations based on too little information or on gossip.
- Requires a multidisciplinary team with different skills and backgrounds that includes community members. Gender balance or predominance would need to be validated against local and cultural constraints. Another objective of adding variety to the team is to offset biases through different perspectives, methods and tools, sources of information, people from different backgrounds and places, background of team members (e.g. spatial, gender, age group, interest group, key informant, wealth group, professional, and discipline).
- Important not to raise expectations unduly among community members.

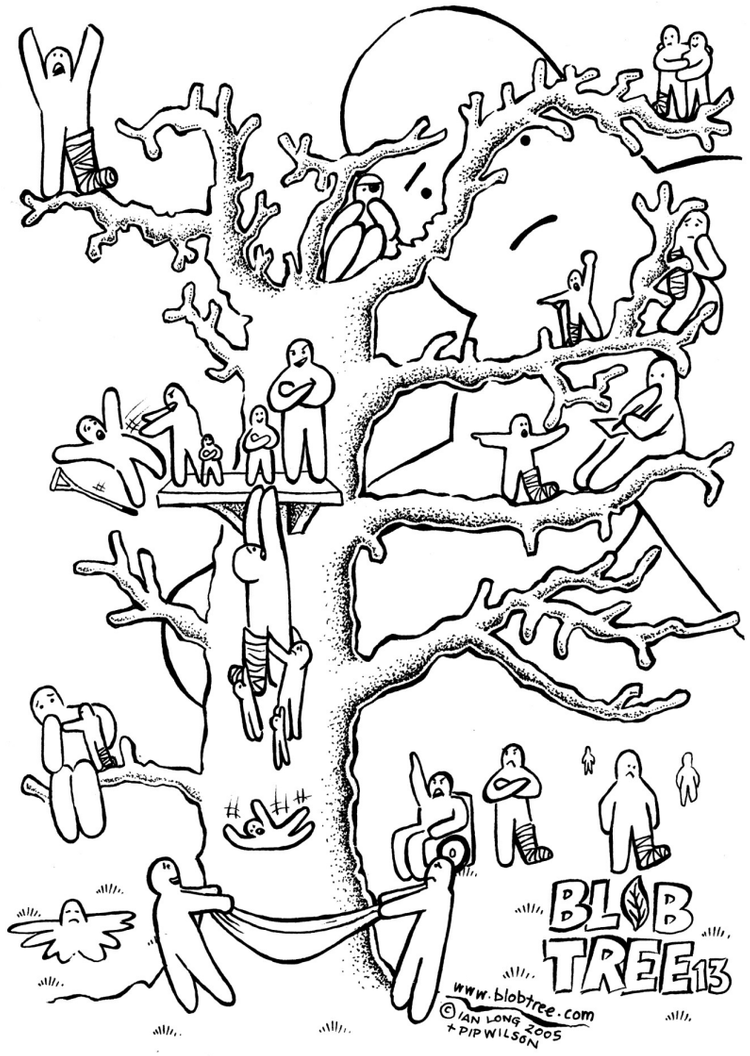

Figure 2: A Blob Tree can be used in working with children; see the case study on page 18.

CASE STUDY

Evaluation of DG ECHO's Actions in the Field of Protection and Education of Children in Emergency and Crisis Situations (2008-2016)

The project to be evaluated

During 2008 to 2015, ECHO funded 241 actions in the area of Child Protection (CP) and Education in Emergencies (EiE) with a total EU contribution of €264.9 million.

The challenge

These actions were implemented in 70 countries, including in hard-to-reach areas.

The innovative approach

The evaluation made use of a large variety of evaluation methods and tools; among them, the Blob Tree (**www.blobtree.com**, see page 17) and the projective drawing analysis. This was used to collect views of children (final beneficiaries) aged 4 to 16 on their perception of the schools/ education activities funded and the extent to which the interventions provided a safer environment for access to quality education. Children do not have the same cognitive awareness and development as an adult so it can be a challenge and not particularly helpful for a child to communicate emotions and what they are feeling through words. This is especially the case when they have experienced trauma and may be feeling complex emotions which could be hard for them to understand and describe.

Operators from child-focussed relief organisations were trained and involved children in 3 drawings describing their emotions and feelings inside and outside the class-rooms; illustrating themselves doing an activity they associate with the classrooms/ school or group; and sketching themselves before and after the intervention.

A team composed of a play therapist and an evaluator of education interventions interpreted the drawings.

Reporting

Evaluation reports should be transparent about the evaluation's validity and limits, and the methodologies chosen. This includes limits that evaluators encountered when accessing beneficiaries in HRAs and in obtaining comprehensive data on results. Evaluators and those commissioning evaluations should be ready to accept hypotheses based on uncertain findings. This includes identifying areas requiring further investigation whenever the evaluation cannot be conclusive in all its aspects.

Reporting findings from the use of geospatial data

Geospatial data analysis is transparent, repeatable, and dynamic, and can generate real-time feedback. Dissemination of complex findings can be carried out through static and interactive dynamic maps and easy-to-understand visualisations, helping decision-makers to channel complex environmental and social realities into policy decisions. Interactive formats involving maps, data visualisation, and shorter written output and reports can help improve policy through quick feedback on relevance and impact of decisions.

Data validity and triangulation

Triangulation of qualitative and quantitative sources, the use of different methods for gathering evidence and the use of relevant evidence are always important when validating findings. This is even more important in HRAs where sometimes trade-offs are needed between data validity and no data.

- Technology offers the possibility to integrate survey data with pictures, sound, etc.
- Availability of big, public data and ever cheaper computing power provides further opportunities that, until recently, were technically not possible or unaf-

fordable.

- Integration of data from different sources may require evaluation teams to have specific statistical expertise.

Typically, it is difficult to collect data on multiple contextual factors affecting programme outcomes. Triangulation, meaning in this case the combination of classical survey data with pictures, sound, video, and geo-located data points through smart phones for evaluation purposes, allows for easier and better documentation of outputs and outcomes. Big data and ever cheaper computing power can help make sense of this surplus of data, which before was often lacking entirely in HRAs.

While using ICT, you need to triangulate results with participatory and mixed methods to mitigate potential bias. Where possible, use data from other sources (e.g. national statistical offices, other agencies, donors, academia, the UN) to complement your own findings.

Both qualitative and quantitative methods of analysis require rigorous design, implementation and analysis. Their use requires different skills and expertise. The methods used, including their limitations and the effects of these limitations on the validity of the evaluation's conclusions must be well described in the final report.

Key point: close the feedback loop

An underestimated aspect of reporting is the need to communicate evaluation results back to crisis-affected populations. The use of participatory techniques, such as Participatory Rapid Appraisal, Outcome Mapping, Outcome Harvesting, Visual Evidence Collection, Most Significant Change, Story Telling, and many others, would support this objective, by involving final beneficiaries in drawing the conclusions from the evaluation. Feedback mechanisms are part of broader evaluation practices and can generate information to:

- Help make decisions.
- Inform corrective action to help improve development projects.
- Srengthen accountability towards beneficiaries.

REFERENCES

Videos of the conferences, the presentations used by speakers, case studies, guides, manuals, grey literature and other relevant and open source references are available at:

https://europa.eu/capacity4dev/devco-ess

If you want to share further relevant resources and are entitled to do so, please send them to **ESS.team@evaluationsupport.eu** for publication.

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- Mr Marco de Gaetano – Natural Resource Management and Conflict Analysis Expert
- Mr André Kahlmeyer – Conflict Management Consulting (CMC), Director
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