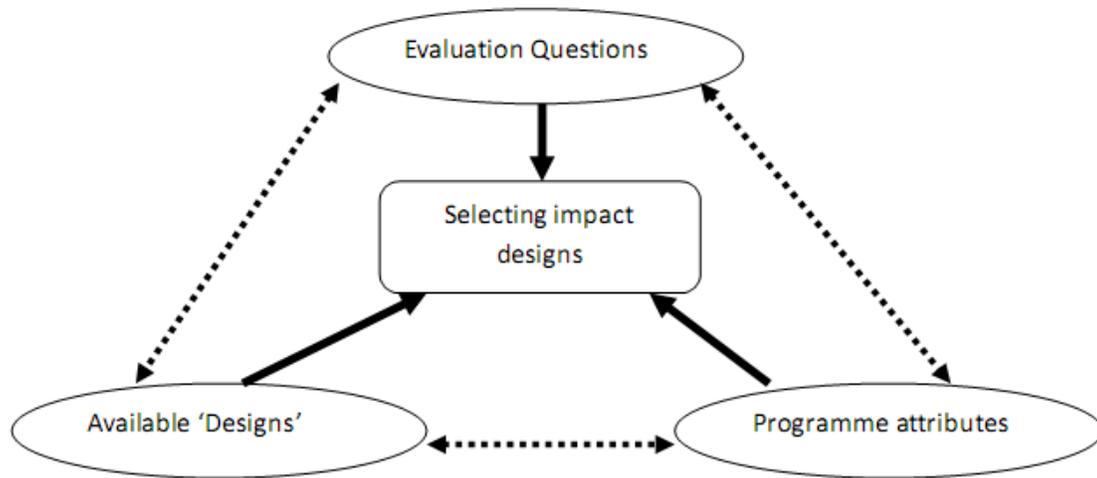


Organising Framework: Design Triangle

Aligning Questions, Designs and Attributes



All Designs Have Strengths and Weaknesses

Table 2.1: Requirements, Strengths and Weaknesses of Four Approaches to causal inference

	Regularity	Experiments/ Counterfactuals	Multiple causation	Generative/mechanisms
Requirements	Many (or highly diverse) cases Independent causes	Two identical cases for comparison Ability to 'control' the intervention	Sufficient number of cases Availability of cases with comparable characteristics	One case with good access to multiple data sources Theory to identify 'supporting factors'
Potential Strengths	Uncovering "laws"	Avoiding some kinds of bias	Discovery of typologies Dealing with limited complexity	In-depth understanding Focus on the role of contexts 'Fine-grained' explanation
Potential weaknesses	Difficulties explaining 'how' and 'why' Construct validity	Generalisation Role of contexts	Difficulties interpreting <u>highly</u> complex combinations	Estimating extent Risks of loss of evaluators' independence

Design Approaches, Methods and Causal Inference		
Design Approaches	Specific Methods	Basis for Causal Inference
Experimental	RCTs Quasi Experiments, Natural Experiments	Counterfactuals; the co- presence of cause and effects
Statistical	Statistical Modelling Longitudinal Studies Econometrics	Correlation between cause and effect or between variables, influence of (usually) isolatable multiple causes on a single effect Control for 'confounders'
Theory-based	<i>Causal process designs</i> : Theory of Change, Process tracing, Contribution Analysis, impact pathways, <i>Causal mechanism designs</i> : Realist evaluation, Congruence analysis	Identification/confirmation of causal processes or 'chains', Supporting factors and mechanisms at work in context
'Case-based' approaches	<i>Interpretative</i> : Naturalistic, Grounded theory, Ethnography <i>Structured</i> : Configurations, QCA, Within- Case- Analysis, Simulations and network analysis	Comparison across and within cases of combinations of causal factors Analytic generalisation based on theory
Participatory	<i>Normative designs</i> : Participatory or democratic evaluation, Empowerment evaluation, <i>Agency designs</i> : Learning by doing, Policy dialogue, Collaborative Action Research	Validation by participants that their actions and experienced effects are 'caused' by programme Adoption, customisation and commitment to a goal
Synthesis studies	Meta analysis, Narrative synthesis, Realist based synthesis	Accumulation and aggregation within a number of perspectives (statistical, theory based, ethnographic etc.)

Summarising the Design Implications of Different Impact Evaluation Questions

Key Evaluation Question	Related Evaluation Questions	Underlying Assumptions	Requirements	Suitable Designs
To what extent can a specific (net) impact be attributed to the intervention?	<p>What is the net effect of the intervention?</p> <p>How much of the impact can be attributed to the intervention?</p> <p>What would have happened without the intervention?</p>	<p>Expected outcomes and the intervention itself clearly understood and specifiable</p> <p>Likelihood of primary cause and primary effect</p> <p>Interest in particular intervention rather than generalisation</p>	<p>Can manipulate interventions</p> <p>Sufficient numbers (beneficiaries, households etc) for statistical analysis</p>	<p>Experiments</p> <p>Statistical studies</p> <p>Hybrids with 'Case' based and Participatory designs</p>
Has the intervention made a difference?	<p>What causes are necessary or sufficient for the effect?</p> <p>Was the intervention needed to produce the effect?</p> <p>Would these impacts have happened anyhow?</p>	<p>There are several relevant causes that need to be disentangled</p> <p>Interventions are just one part of a causal package</p>	<p>Comparable cases where a common set of causes are present, and evidence exists as to their potency</p>	<p>Experiments</p> <p>Theory based evaluation, e.g. contribution analysis</p> <p>Case-based designs, e.g. QCA</p>
How has the intervention made a difference?	<p>How and why have the impacts come about?</p> <p>What causal factors have resulted in the observed impacts?</p> <p>Has the intervention resulted in any unintended impacts?</p> <p>For whom has the intervention made a difference?</p>	<p>Interventions interact with other causal factors</p> <p>It is possible to clearly represent the causal process through which the intervention made a difference – may require 'theory development'</p>	<p>Understanding how supporting & contextual factors that connect intervention with effects</p> <p>Theory that allows for the identification of supporting factors - proximate, contextual and historical.</p>	<p>Theory based evaluation especially 'realist' variants and Contribution Analysis.</p> <p>Participatory approaches</p>
Can this be expected to work elsewhere?	<p>Can this 'pilot' be transferred elsewhere and scaled up?</p> <p>Is the intervention sustainable?</p> <p>What generalisable lessons have we learned about impact?</p>	<p>What has worked in one place can work somewhere else</p> <p>Stakeholders will cooperate in joint donor/beneficiary evaluations</p>	<p>Generic understanding of contexts e.g. typologies of context</p> <p>Clusters of causal packages</p> <p>Innovation diffusion mechanisms</p>	<p>Participatory approaches and some Experimental and Theory based approaches</p> <p>Natural experiments</p> <p>Realist evaluation</p> <p>Synthesis studies</p>

Programme Attributes and Design Implications		
Programme attributes	Evaluation challenge	Design Implications
<i>Overlap with other interventions with similar aims</i>	Disentangling effects of this programme from others	Consider multi-programme evaluations where purposes are related Possibility of 'Contribution' analysis Consider joint evaluations with other donors or with government partners
<i>Multiple and diverse activities and projects</i>	How to assess programme impacts and distinguish them from component impacts	Ensure that programme goals inform the criteria for 'project' evaluation Provide a common evaluation framework for projects to guide their evaluation Conduct case studies of linked policy decisions/implications/ 'spill-overs' Provided they all aim for common goals and are similarly implemented use configurational/QCA type methods
<i>Customised non-standard projects often implemented in diverse contexts</i>	How to add up or synthesise 'apples and pears'	Identify alternative Theories of Change Focus on mechanisms rather than effects (e.g. realist synthesis) Develop typologies of 'contexts' or settings Involve stakeholders and beneficiaries to obtain 'local knowledge' – participatory designs
<i>Programmes working 'indirectly' through 'agents' and often at different levels and stages</i>	What should be the evaluation strategy at different stages? How to break the evaluation down into manageable parts	Distinguish between different programme stages – e.g. setup, implementation and delivery Devise 'nested' evaluation strategy Consider need for technical assistance alongside intervention to support 'agents' & intermediaries
<i>The likely impacts of programmes were long term</i>	When to conduct an evaluation and how to judge success	Construct a time extended Theory of Change Use monitoring systems and indicators to estimate 'distance travelled' Assess the implementation trajectory in order to judge when evaluations are likely to register 'impacts' Track critical events that could re-direct programme
<i>Working in areas of limited understanding/experience</i>	Constructing a valid Theory of Change Finding evidence to support a ToC that was put forward	Regard Theory of Change as an 'evolving' object – options to revise it Explore alternative causal pathways Involve stakeholders in articulating their own Theories of Change
<i>Working in areas of risk or uncertainty</i>	Likelihood of set-backs and uneven progress (step level change). No proportional relation between cause and effect	Conduct an evaluability assessment Design an iterative or staged evaluation strategy that can respond to 'emergence' Identify 'trigger points' and bottlenecks' Real-time evaluation – with formative elements – rapid feedback capacities
<i>Intended impacts are difficult to measure, possibly intangible</i>	How to know what impact is – it may mean different things to different stakeholders and beneficiaries	Jointly develop a Theory of Change with inputs from stakeholders and beneficiaries Agree on intermediate and long-term impacts along an implementation trajectory Participatory inputs to better define impacts

ALTERNATIVE DESIGNS & METHODS: WORKSHEET TEMPLATE

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<i>Designs</i>	Inference basis	Role of theory	Method ‘families’	Typical Methods and Techniques	Units of analysis	Impact focus
<i>Experiments</i>	Counterfactual Co-presence of ‘cause’ and ‘effect’. Extent to which a single cause (the independent variable) leads to a single effect (dependent variable).	Generally absent. If used, tests theories of causation. Alternatively theory is complementary, used to interpret findings	RCTs Quasi-experiments Natural experiments	Control groups Random assignment Propensity Score Matching Interrupted time series Regression discontinuity	Single intervention or small number of comparable interventions. Large populations (e.g. households, firms, individuals) participating in single interventions.	Attribution not explanations. Looks for the effect of the cause
<i>Statistical Association</i>	Correlation between cause and effects Co-variation among variables Descriptive inference	Optional, can be used to tests theories.	Statistical modelling, Longitudinal studies Econometric approaches	Random sampling Regression analysis Multivariate analysis Net effects of different variables	Large populations e.g. households, firms, individuals Not necessarily ‘intervention’ based	Influence of independent, multiple causes on a single effect. Looks at the causes of an effect
<i>Theory Based Evaluation</i>	Identification of causal processes and mechanisms and eliminating alternative explanations	Vital. Testing and interpreting existing theory leading to further theory building	Realist evaluation, ‘Theories of Change’, Contribution analysis Causal pathways Impact pathways	Analysing internal programme structure and process ‘Backward’ tracking Critical incident analysis Tracing/process studies Triangulation	Relatively small number of cases or single case	Causal processes in context Looks for explanations of multiple causes leading to effect(s)

<i>Case Studies</i>	Analytic generalisation derived from theory. Theory building Comparison with other cases (abduction)	Vital Theory testing and theory building, including hypothesis generation	Naturalistic, Grounded theory Ethnography	Qualitative methods 'Mixed' methods Triangulation Vignettes	The single (complex) case not necessarily intervention based e.g. Spatial & institutional studies	Multiple causes of multiple observed effects Looks for causes of these effects
<i>Comparisons/ Configurations</i>	Analysis of necessary and sufficient conditions – INUS cause	Important First applying then interpreting theory	Comparative case studies QCA (Qualitative Comparative Analysis) Explanatory Case Analysis	Comparative case analyses Historical analysis Triangulation Matrical methods	Small or moderate numbers of complex cases	Multiple causes leading to multiple (similar or different) impacts Looks for the causes of the effect
<i>Participatory Evaluation</i>	Validation by participants that their actions and experienced effects are caused by the program	Optional as a basis but leads to theory building	Participatory or democratic evaluation. Action research Most significant change Collaborative knowledge production Empowerment evaluation	Grounded theory Appreciative enquiry PRA Participatory mapping	Stakeholder dialogue/ interaction/ interpretations and judgements Impacts for whom	Relevance and success through participation and ownership Looks at how causes (participation, ownership etc.) lead to effects