

## Example of Guidelines on Attribution PRISMA

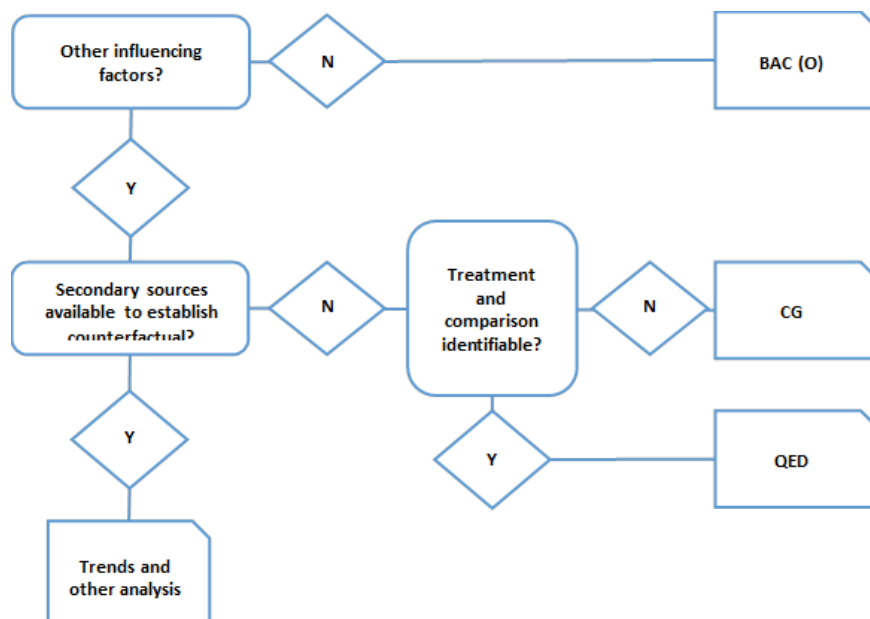
The changes we will measure are partly due to PRISMA's interventions but also to other external factors such as weather patterns and macroeconomic changes which have an impact on the changes in the performance farmers. In order to isolate the changes and impacts that are attributable to our intervention, PRISMA needs to estimate the changes and impact that would have happened anyway, even without the intervention. This is known as the “counterfactual”. The impact attributable to our intervention is the difference between the counterfactual and the total change observed/measured.



To select the most appropriate method to assess attribution, the first step is to identify the key external factors that might also affect the changes observed, such as weather conditions, or other donor or government programs. This, together with our knowledge of the sub-sector, will enable us to select the best measurement method, balancing between most appropriate and feasible. The diagram below is a guideline that can help to decide which research method to use for attribution.

Other factors may also influence which methodology is chosen; the final methodology should be approved by the RMM and/or HRML. The attribution method selected must be described in the Overall MRM Strategy worksheet in the ISD.

## Selection of Attribution Strategy



Attribution Methods	When to use it
<b>Before and after comparison (BAC)</b>	
Measuring the value of the (key) indicators a) before the intervention takes place (baseline), and b) after the intervention (end line). The difference between those two measurements is the change that is then reported (e.g. net additional income).	When the change is very obviously due to the intervention, i.e. there are no external influences that might affect the change. Because PRISMA is targeting farmers, it is very rare that there are no other external factors. The BAC method can be used to measure changes at lower levels (like that of the ISP and partner). However, even in this case we prefer to understand why the change took place. Hence, we always prefer to combine this BAC with Opinion.
<b>Before and after comparison with opinion (BACO)</b>	
The Before and After Comparison with Opinion is like the BAC method, with the addition that we also ask the opinion of the partner, ISP, farmers or other stakeholders involved. This provides us with confirmation of why the change took place or did not take place.	When there are no external factors possibly influencing the change, or when it is impossible to obtain data on the counterfactual either because the change affects the entire population or because it is not feasible to isolate those who are not affected. A BAC can be combined with collecting the opinions of respondents on whether the changes were due to the intervention. Opinions can also be collected from other stakeholders or key informants. Such consultations can be obtained using interviews, focuses group discussions or stakeholder workshops. The opinions are used to triangulate findings of the before and after studies.
<b>Trend and other analyses using secondary data to establish the counterfactual</b>	

<p>A trend analysis compares the annual increase or decrease for a certain indicator (such as export value per year) over recent years and compares the change in that trend with the measured value of that indicator after the intervention.</p> <p>Other comparisons include comparing the smaller group of treatment farmers with the entire farmer population using secondary information.</p>	<p>If relevant and reliable statistical information is available on a number of key indicators, then one can compare the 'projected slope' (which would present the counterfactual) with the actual measured value; the difference is the change attributable to the intervention. One may also compare actual measured data with other data available for the entire population. These comparisons are challenging and should only be made if reliable information is available.</p>
<b>Quasi experimental design (QED)</b>	
<p>To carefully select one group of farmers which will benefit from our intervention (treatment group) and another group of farmers that will not benefit from our intervention (comparison group) before the intervention takes place. We measure the before and after situation of both the treatment and the comparison groups. This implies we have to do a BAC for both groups and compare both differences (the 'difference-in-difference').</p>	<p>Provides credible numbers, and is thus in principle preferred. However, it is very challenging to apply to M4P interventions, as to do so means categorising groups into those who will be benefited and those who won't, which is restrictive. The two groups chosen will also have to be very similar so that a comparison is feasible. In addition, it is resource intensive (two baselines, two endlines).</p>
<b>Comparing user and non-user groups (CG)</b>	
<p>To compare those farmers who benefited from our interventions (users) with who did not (non-users). The identification of users and non-users is often done using the intervention logic: some ISPs will be providing the service (resulting from our intervention), while others may not: hence the farmers who are clients of the latter can be part of the comparison group. We can also 'wait' and sample a number of farmers who are clients of the applying ISPs, and compare those farmers who applied (the advice) with those who did not.</p>	<p>This is easier to apply than QED as the program does not have to restrict farmers into groups of users and non-users. However, there may be a selection bias inherent in this method, i.e. those that used the product/services may be better off anyway than those that did not use the product/service. It can be used when we expect that not all potential users will actually become users (and leave no comparison group). The reason for farmers using or not using the service is crucial for us to understand. For many interventions, this will be the most practical attribution method.</p>

**Source:** PRISMA Results Measurement Manual, February 2015 (p. 18-20)