FRONT-OF-PACK LABELLING AND VISUAL CUES AS TOOLS TO INFLUENCE CONSUMER FOOD CHOICES IN LOW- AND MIDDLE-INCOME COUNTRIES

LESSONS FROM THREE WORKSHOPS

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ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition. Working with governments, businesses and civil society, we aim to transform food systems so that they deliver more nutritious food for all people, especially the most vulnerable.

Recommended citation


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SUMMARY

Most front-of-pack labelling (FOPL) systems operate in high-income countries (HICs) on packaged foods purchased in a supermarket setting. They are developed to encourage industry to reformulate products and consumers to make better choices. Most research on the effectiveness of labelling systems is also drawn from HICs and either focused on industry reformulation or consumer attitudes to labelling systems and purchase intent. There is increased interest in utilising this policy tool in low- and middle-income countries (LMICs), but very little evidence on this exists, and there is no consensus as to how such labels could be used in these settings. To explore the role that FOPL and other types of visual cues could play in supporting consumers’ ability to choose nutritious foods in LMICs, GAIN convened three workshops in 2018-2019. The first gathered industry experts on FOPL to assess the potential relevance of such labels for a typical LMIC context and the applicability of the current evidence base. The workshop concluded that none of the current FOPL systems could be replicated for a LMIC context without adaptation; designing a solution, participants agreed, should be done with a specific context in mind. The second and third workshops built on the earlier findings by working with local stakeholders to envision a solution specific to Pakistan. Workshop attendees also developed a roadmap for designing a solution and identifying the right stakeholders to engage.

KEY MESSAGES

• Three workshops were convened to discuss whether FOPL and visual cues could be used in LMICs to encourage low- and middle-income consumers to make more nutritious food choices
• The workshops discussed the typology of FOPL, evidence for applicability of FOPL systems to an LMIC, how current FOPL systems could apply in Pakistan, and how a solution for Pakistan could be collaboratively developed.
• It was concluded that there is limited evidence on current FOPL systems’ effectiveness at encouraging more nutritious consumer food choices.
• In addition, all current systems, having been predominantly designed for HICs, would need modification to accommodate the different nutritional challenges faced by LMICs, the dominant traditional retail environment, and the fact that many consumers purchase their food loose and unpackaged.
• Implementing FOPL or visual cues in LMICs requires significant effort; it should also be accompanied by investment in increasing or assuring the supply of nutritious foods, improving food safety, and securing support from retailers.
BACKGROUND AND OBJECTIVES

In 2004 the World Health Organization called upon the food industry to “make the healthy choice the easy choice” by reducing levels of sodium, trans-fatty acids, saturated fat, free sugars, and total calories in food and through responsible communication (1). As part of their effort to do this, policymakers have begun using front-of-pack labelling (FOPL) to communicate nutrition information in more accessible formats, such as symbols and colours. Most current labelling systems exist in high-income countries (HICs), with the approach tailored to the retail environment and nutritional needs of those markets.

Interest has been increasing in using this policy tool in low- and middle-income countries (LMICs). There is limited evidence available, however, on how to do so: most of the research on the effectiveness of labelling systems is drawn from HICs and tends to focus on consumers’ attitudes to labelling systems and their purchase intent (2). This research has helped to highlight which labelling systems are acceptable to consumers, but it has fallen short in terms of understanding how these systems affect consumer choice (3). There is thus considerable opportunity to explore how labelling systems can enable consumer choices in LMICs.

GAIN thus designed a project to explore the role that FOPL and visual cues\(^1\) could play in supporting consumers’ ability to identify and choose nutritious foods at the point of purchase or consumption, in the context of an LMIC, for the benefit of low- and middle-income consumers. Given the limited evidence base on this subject, GAIN held a series of workshops bringing together experts with a range of experiences, knowledge, and evidence on the use of FOPL and visual cues. Participants then considered the labels/cues applicability to low- and middle-income consumers in LMICs. This report provides an overview of these meetings and their key conclusions. This report is not organised chronologically but rather structured to reflect the key points and conclusions. It also includes relevant research findings, literature, and policy updates that were not available at the time of the meetings.

OVERVIEW OF THE MEETING 1: LONDON

The first workshop took place in London in June 2018. It was attended by participants from The George Institute of Australia (creators of the Health Star Rating (4)); the Choices Programme (5); the World Food Programme (WFP), which is leading development of the ‘Good Food’ seal in Zambia; Ogilvy London, which, with support from the Bill and Melinda Gates Foundation (BMGF), is developing a programme in Nepal aiming to communicate the optimal basket of food; Winward Commodities, a private-sector organisation that is developing a self-sustaining food logo in Zimbabwe; food technologists; an interested donor (BMGF); and GAIN staff from the Canada, Netherlands, Nigeria, and United Kingdom offices. A representative of the team that developed the Chilean food advertising legislation and

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\(^1\) FOPL is, by definition, used on packaged foods. In LMICs, where a lot of food is sold loose in traditional and informal markets, point-of-sale advertising serves as a comparable communication device to guide consumer choice. Thus, we prefer to use the term “visual cues” to capture the range of pictorial and (short) written labels on or near food products intended to guide consumer choice.
associated warning label joined briefly by phone. Dominic Schofield of GAIN moderated the workshop.

The workshop was structured around the question, “Can FOPL and visual cues be used in LMICs as a tool to encourage low- and middle-income consumers to make more nutritious food choices?” On Day 1, the participants discussed the current typology of FOPLs (their objectives, target audiences, and limitations) and their applicability to the convening question. The day concluded with an agreement on three premises related to the role FOPL and visual cues can play in encouraging low- and middle-income consumers to make more nutritious food choices. Day 2 was structured as a discussion of these premises (limitations and considerations) and ended with the participants aligning around a single premise for future development.

DAY 1 - PART 1: TYPOLOGY OF SYMBOLS

FOPL systems can take many forms, as shown in Figure 1. The first are nutrition information panels (NIP) highlighting the quantity of total energy, fat, saturated fat, sodium, and sugar (and perhaps other nutrients) found in a product. These are known as reductive approaches and typically express nutrient contents in terms of a Percentage Daily Intake (PDI) or Recommended Daily Intake (RDI). Others, known as hybrid approaches, contain varying proportions of nutritional information and opinions or recommendations. Examples include the United Kingdom’s traffic light label (TLL), which provides a colour-coded (red/amber/green) indication, and the French Nutriscore system, which ranks foods from dark green [A] (healthiest) to dark red [E] (least healthy) (4). The Australian and New Zealand Health Star rating system (HSR) includes both reductive and hybrid elements and can appear, at the manufacturers discretion, on a package in one of two ways: the star rating (1–5) only or the star rating plus additional specific nutritional information for energy, saturated fat, sugar, and fibre in the form of a NIP.

The third type is an evaluative binary scheme. Such schemes can be positive or negative, universal or targeted. Positive binary logos, such as the Keyhole logo (Sweden), the Choices logos (5) (Denmark, Poland), the Healthier Choices Logo (Singapore, Malaysia, Thailand and Brunei), the Good Food logo (Zambia), the Obaasima logo (Ghana) (6), and the Heart Foundation Logo (7) (Nigeria) provide an accreditation that the food complies with a predetermined nutrition threshold, determined by the food category. They can be universal (e.g., Keyhole, Choices, Healthier Choices, and Good Food) or targeted to a specific population group (e.g., the Obaasima Logo, which is targeted to women of childbearing age). Negative binary ‘warning’ logos are a rapidly growing tool with systems implemented in Finland (8), Chile (9), and Peru (10). Whilst Finland has required all packaged foods high in salt to carry a ‘high in salt’ warning since 1993, Chile, Peru, and Israel (11) have passed broader legislation that requires warning logos on any food that exceeds a pre-determined threshold for salt, sugar, saturated fat, or calories. If a food exceeds multiple thresholds, it must carry multiple warning logos. Similar mandatory systems are under consideration in Brazil and Canada (12).
The scope of these systems globally is illustrated in Figure 2. Currently, 55 countries across the European, Latin American, and Western Pacific regions use some type of voluntary FOPL system, and only six countries have mandatory FOPL (13). Underpinning each of these is a Nutrient Profiling System (NPS) that determines whether a food can or should carry a binary logo, what score it would receive under the Health Star or Nutriscore systems, and/or what traffic light colours it would carry. Many NPS share common features, and many are simply

Figure 2: Countries with either mandatory or voluntary FOPL systems on packaged foods. © 2018 Global Food Research Program, University of North Carolina. Permission not required.
extensions or variants of prior systems (14). The ability of these systems to recognise and account for the nutritional needs of a given population are foundational to achieving their goals.

**DAY 1, PART 2: APPLICABILITY TO LMIC CONSUMERS**

Having reviewed the current FOPL typology, the discussion then turned to the limitations of the systems and assessing whether any of them, and any of the evidence from HICs, were applicable to the context of low- and middle-income consumers in LMICs. Their applicability was discussed considering three areas: the nutritional challenges in the context, the objectives of the label, and the retail environment for which they were designed. There were two limitations of this discussion. First, the group was not able to assess all the current evidence, so the discussion did not aim to be complete. Second, some assumptions and generalisations were made that may not be true for all target consumers across all LMICs.

**Limitations of existing typologies**

FOPL are not consistently utilised by consumers. For example, a systematic review of the evidence from the European Union (EU) (15) found that FOPL were more commonly used to assess health credentials of processed foods (particularly those targeted at children) where the large number of ingredients make the healthfulness harder to ascertain. This was when compared to categories of foods already known to be unhealthy such as chocolate, crisps, and sweets and those categories known to be healthy such as fruit, vegetables, and meat.

Logos and visual cues have also been found to be more effective amongst certain population groups (15-17), but the evidence is inconsistent. A 2010 study in the Netherlands (16) found that women and parents of pre-teenage children living at home reported using logos more frequently when making purchase decisions than men, adults with no children, or adults with children living outside the home. It also found an age effect, with older informants more likely to use FOPL due to generally greater health concerns. A more recent study in the EU found, in contrast, that households with children tended to have a lower probability of purchasing labelled products compared to other household types; the researchers concluded that observable consumer characteristics are poor determinants of label use (18). More research is needed to resolve this inconsistency.

**Assessing the typologies**

**Nutritional challenge**

Most of the current systems operating in HICs focus on reducing consumption of nutrients that can have a detrimental effect on health (e.g., sodium, trans-fatty acids, saturated fat, free sugars, and total dietary energy) in order to help prevent NCDs. However, LMICs face a more nuanced challenge that may require a different approach. This so-called ‘double burden of malnutrition’ (19) entails increasing prevalence of overweight and obesity coexisting with continued high prevalence of underweight, micronutrient deficiencies, and/or protein-energy malnutrition. It could therefore be beneficial for those consumers to receive information on both ‘nutrients to limit’ (i.e., those associated with increased risk of NCDs) and ‘nutrients to encourage’ (i.e., those for which consumption should be increased to reduce under-nutrition, such as vitamin A, iron, zinc, high-quality protein, and certain fats). The NPS used to assess
foods and the corresponding communications system need to account for both sides of this
double burden. At present, the NPS underpinning HSR (Australia), Nutriscore (France) and
Choices have all included both ‘nutrients to limit’ and ‘nutrients/ingredients to encourage’
such as fruit, vegetables, and protein, making them potentially applicable to an LMIC
context.

Objective

A second challenge with directly applying the existing systems, especially those that are
voluntary, to LMICs is that they are designed with the objective of encouraging the food
industry to reformulate products. There is evidence from the Netherlands (16), the UK (20),
and Australia (21) that industry responds to FOPLs with product reformulation. However,
there is much less evidence regarding the impact they have on consumer choice. This arises
both because consumer choice is not a prioritised outcome and due to challenges in
measurement. Consumer choice can be measured either as intended choice (as recorded
through, e.g., a survey) or as an actual purchasing decision (captured in choice experiments,
willingness-to-pay studies, or observations). However, intention has been shown to be a poor
predictor of actual behaviour (22), data from choice experiments or willingness-to-pay studies
do not extend to real-world purchase decisions (23), and actual purchasing data can be hard
to obtain from retailers or manufacturers. Of the studies that do look at the effect of symbols
and visual cues on sales, the majority of which have taken place in EU countries, outcomes
are variable; in addition, most studies have been short in duration (24). It is therefore difficult
to assess the effects of different FOPL typologies on consumer choice.

Designed for self-service retail

Another challenge with the current systems’ applicability to LMICs is that they are all
designed for implementation in supermarkets or similar retail settings, reflecting the large
proportion of household grocery expenditures that take place in such channels in HICs. This
is not the case for low- or middle-income consumers in LMICs, where most food purchases
are made in traditional retail environments and consumers are often served foods over the
counter by a shopkeeper as opposed to selecting them from the shelf themselves (25).

DAY 2

Building on the above discussions and evidence from the literature, the workshop
participants identified three premises for how FOPL and visual cues could be used in LMICs
as a tool to encourage low- and middle-income consumers to make more nutritious food
choices.

Premise 1: FOPL systems are a useful mechanism to persuade the food and drink industry to
make their products more nutritious (by reducing ingredients like salt, sugar, and fat,
fortifying with micronutrients, increasing fibre, etc.). Such systems may have some modest
influence on consumer choices within certain product categories. This route initially works
through modern retail, particularly supermarkets.

This premise builds on the largest body of evidence reviewed, and the participants
concluded that this route has less relevance for low- middle-income consumers in LMICs. This
was concluded for two reasons. First, formal retail is growing rapidly in LMICs, but most food
is still purchased unpackaged from informal marketplaces, making on-pack solutions less immediately applicable. Second, product reformulation was not the core objective of the convening.

Given this, the group then discussed a second premise that extends the current systems to increase their applicability to the retail environment of LMICs.

**Premise 2:** FOPL and visual cues can be used both on and off packaging, for example in or on shops or hawker stalls, to increase their relevance to low-income consumers in LMICs, who buy much of their food from these outlets rather than supermarkets.

There are three possible ways in which this premise could be explored. First would be by extending FOPL beyond supermarkets and self-service shops to informal retail kiosks and weekly markets. Second would entail using FOPL systems in merchandising and in-store communications to make them relevant for foods sold in loose formats. Finally, the layout of informal markets could be redesigned to ‘cluster’ nutritious foods in certain locations, making it easier for consumers to choose nutritious foods.

There are no known programmes that have explored these specific design challenges, and there is very little evidence that can be directly applied. However, there are two bodies of evidence from which lessons can be drawn. The first is merchandising, including point-of-purchase communication as a driver for stimulating behaviour change at the moment of choice or purchase. The second is behavioural economics and its application to the formal retail environment in the form of ‘nudging’, or reshaping the environment in order to alter consumers’ behaviour, without reducing choice or significantly altering economic incentives (26). Nudges can take the form of increasing accessibility of certain products - for example, placing items of interest at eye level on supermarket shelves or placing them close to the check-out area in which consumers must wait. There is an opportunity to explore how nudges could be used in the informal retail environment.

In order to use a logo to communicate about nutritious food choices, the logo should be visible on as many foods as possible. This would allow for comparison within and across categories and holistic understanding of the consumption patterns underpinning a healthy lifestyle. A core part of testing this premise would therefore be designing a visual cue, testing it with consumers to assess comprehension and potential usage, and designing a communications campaign that would run both inside and outside the retail environment. This campaign would aim to motivate consumers to see the value of the visual cue in supporting their choices, educate them on the visual cue’s utility, and direct consumers towards specific foods that reflect a more nutritious choice.

**Premise 3:** Visual cues and accompanying communications campaigns can be used to motivate consumers to choose more nutritious foods and to galvanise support from retailers, the food and beverage industry, and the government for such efforts.

This premise works to activate both demand and supply. A communications campaign would aim to mobilise consumers to recognise the benefits of and then demand more nutritious foods, introducing the visual cue as a way of identifying those foods. One of the expected results of increasing demand in this way would be the supply side respondi
nutritious products. This would entail a different type of visual cue: one that does not aim to communicate about specific nutrients to limit or encourage but rather represents nutritional quality more broadly.

There are very few examples of these types of campaigns in the public sector, but they are the predominant marketing tool in the private sector. Brands often use emotional communications to build relevance and trust in their brands and shape consumer preferences at the point of purchase. This premise is supported by research on EU consumers’ ability to process and use claims. The researchers concluded that use of visual cues is determined by consumer motivation and recommended that future EU food and nutrition policies and marketing strategies focus on increasing consumer motivation by increasing their interest and recognition of the need for health information (27).

WORKSHOP 1: CONCLUSIONS

The workshop participants concluded that further work exploring premises 2 and 3 represents the largest opportunity to further the evidence base. Premise 2, however, was concluded to be of more immediate value in terms of responding to the original convening question. In order to progress on developing premise 2, workshop participants agreed to identify a specific geographical context in which to design potential solutions. No ideas for this setting were forthcoming during the workshop, but in follow-up discussions with all participants, Pakistan emerged as the most promising. This was for two key reasons. First, GAIN Pakistan has strong relationships with two state food authorities, in Punjab and Khyber Pakhtunkhwah, which are tasked with ensuring the safety and hygiene of all foods sold; having such partners is essential for any project aiming to promote foods for their nutritional quality. Second, The George Institute expressed interest in this geography.

It was therefore agreed that a second workshop would be held with relevant Pakistani partners and stakeholders to discuss potential opportunities to explore solutions to Premise 2. Premise 3 would continue to be developed by the demand creation team at GAIN as an independent project.

OVERVIEW OF MEETINGS 2 AND 3: DUBAI

The second and third workshops were held in Dubai in October 2018 and May 2019, respectively. In October 2018 the group convened to discuss how FOPL and visual cues could be used to encourage low- and middle-income consumers to make more nutritious choices when shopping for both packaged and unpackaged food in both formal and informal retail settings in Pakistan. In May 2019, the same core group, with some additional attendees, convened to engage a broader set of relevant stakeholders and identify the process needed to design possible solutions. Full lists of attendees at each meeting can be found in Annexes 5 and 6. The October meeting was moderated by Laura Litvine and Christine Kelly from the UK Government Behavioural Insights Team (BIT) and the May meeting by Siddharth Kanoria, Quantum Consumer Solutions. The BIT, formally known at the Nudge Unit, works to apply behavioural insights to issues of public policy and social change; they had been identified in the first workshop as a potentially useful partner in a second workshop.

UNDERSTANDING THE PAKISTAN CONTEXT
**Identifying the target**

Using simulated field exploration (thanks to high-quality videos and photos produced by GAIN Pakistan), summarised facts on diets and the retail sector in Pakistan, and participants’ combined expertise, participants were able to gain a better understanding of the Pakistani context. Through the discussions, and in line with the London workshop, workshop participants decided to focus on low- and middle-income consumers, who could credibly afford better diets and would offer the largest potential for impact.

Which foods should be encouraged or discouraged to promote better diets?

Figure 3, presented during the workshop, compares the distribution of expenditures on different foods by the average household in Punjab (from national survey data) to the estimated minimum-cost nutritious diet (based on Cost of Diet calculations). It shows that the average household could benefit from consuming less grains (mostly wheat), oil and fats, and sugar (including confectionery and sodas) and more meat, fish, legumes, nuts and seeds, and dairy. The study also suggested that only minimal changes could be made to fruit, vegetable, and root crop consumption, as the average household already consumed more fruit than recommended under the minimum-cost nutritious diet (3% versus 1% of food expenditures) and consumed only slightly fewer vegetables and root crops than under the minimum-cost nutritious diet (8% versus 10%). Building on these data, the workshop participants concluded that the targets should be decreasing consumption of products high in fat and/or sugar and increasing consumption of legumes and safe milk.

![Figure 3: Comparison of actual and cost-efficient expenditure on food in Punjab (28). Permission not required.](image)

What are potential places at which to encourage consumer demand for nutritious foods?

Discussions revealed two key insights about the shopping behaviour of the average household from the target population group. First, they shop primarily at small formal or informal stores (kiryana stores) for grocery items such as sugar, oil and fat, pulses, and rice. For low-income households, these foods are often purchased on a daily basis in loose form, with kiryana store owners packaging foods for consumers on request. Second, wheat appears to have a separate supply chain, being either grown or purchased at open grain markets.
Most households (both urban and rural) prefer to have their wheat milled in bulk at a local flourmill.

There is a notable trend in urban and peri-urban areas towards larger general stores and supermarkets as opposed to the smaller kirana stores. These stores are mostly frequented by upper-middle-income and high-income groups. General stores and supermarkets would offer relatively easy-to-target points for interventions. Shop-owners or managers can likely be easily identified via their suppliers or head offices. Moreover, the locations of these shops are fixed, making it easier to target an intervention and measure its outcomes. Kiryana stores, on the other hand, form the largest share of the retail sector and thus represent an important segment for reaching the target population.

Towards a solution in Pakistan

Discussions in the Dubai workshops contextualised the conclusions of the London meeting to the Pakistan context, including the purchasing behaviour of low-income consumers, the retail landscape, and the priorities of the organisations that would be essential partners for success. In doing so, the meetings identified a series of principles underlying a successful solution. These are as follows:

- Many of the commodity foods in Pakistan (e.g., flour, sugar, oil, legumes, eggs, meat, and fish) are currently purchased in loose form by low-income consumers. Any visual cue solution therefore must be implementable both on- and off-pack.
- Communications (including educational campaigns, motivational communications campaigns, and advertising regulations) will be important to mobilise consumers to recognise the benefit of the visual cue and provide a key to interpret communications materials and labelling added to food packages.
- Partnering with retailers, both formal and informal, will be essential for success. Kiryana store owners have extensive influence over consumer purchasing decisions. Engaging them as advocates will encourage clear communications at the point of purchase.
- In discussions, the Food Safety Authorities, Punjab Food Authority and Khyber Pakhtunkhwa Food Safety and Halal Food Authority, reinforced the significance of ensuring food safety is addressed, either prior to or consecutively with food quality. With large quantities of foods sold loose, foodborne illnesses remain a public health concern; if foods are to be promoted as being of high quality, they must first be assessed as being safe for consumption. These parameters are addressed using other regulatory structures in HICs and therefore not built into the solution design.
- There is a strong interest from the public sector in the provision of safe and nutritious foods, and the Food Safety Authorities are open to aligning their approaches with innovative ideas.
- The workshop participants acknowledged the interconnected nature of demand, supply, and policy in the success of any solution; collaboration would be required to achieve the support of government agencies, manufacturers, and retailers.
- Policymakers are receptive to considering innovative ideas and can be influenced to further strengthen and adapt the regulatory regime (e.g., legislation for mandatory packaging of spices, new policies on the distribution of safe milk).
• Considerable time, effort, and investment would be required to design, test, and ultimately implement a solution.

CONCLUSIONS

The Dubai meetings’ conclusions built on those of the workshop in London. Workshop participants agreed that certain elements of the Pakistan retail landscape make it necessary to design a bespoke solution. In contrast to the current solution set, designed for packaged foods sold in formal retail in high-income countries, Pakistan has a large informal retail sector, accounting for much of the total food purchases of low- and middle-income consumers. These consumers largely rely on unpackaged goods rather than packaged products, as the former offer the flexibility of purchasing only what is needed at the time. The shop owner can be influential in consumer choices, often selecting and bagging commodities for consumers. A visual cue solution will need to account for the mixed formal and informal nature of the retail landscape, the influence of informal shop owners, and both packaged and unpackaged foods. This is a large undertaking that will require close collaboration with supply-side actors and policymakers as well as significant resources. However, it was the conclusion of the workshop participants that this work has the potential to significantly improve dietary choices and have a positive impact on the nutritional challenges faced by low- and middle-income Pakistani consumers. An accompanying Discussion Paper (29) provides an assessment of the types of visual cues that are most likely to guide positive consumer choices in LMIC settings. It is from that basis that a bespoke solution for Pakistan could be designed.
REFERENCES

14.
## ANNEX

### Annex 1 – Agenda Meeting 1

#### DAY 1

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<td>Bruce Neal</td>
<td>Who are we trying to help?</td>
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<td>Raphael Siwiti</td>
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<td>Annett Roodenburg</td>
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<td></td>
<td>Raphael Siwiti</td>
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#### DAY 2

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<td>9:30 – 10:00</td>
<td>Premise validation</td>
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<td>10:00 – 10:30</td>
<td>Present premise validations</td>
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| 10:30 – 13:00 | What are the elements of an ecosystem for each premise? | Supply side  
Demand side  
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| 13:00 – 14:00 | Lunch                                       |                                                                      |
| 14:00 – 15:00 | Identifying the gaps and opportunities     |                                                                      |
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## Annex 2 – Agenda Meeting 2

### DAY 1

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<td><strong>Session 3: Introduction to the TEST framework</strong>&lt;br&gt;Target, Exposure, Solution, Trial</td>
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<tr>
<td>14:00 – 15:30</td>
<td><strong>Session 4.a: Target &amp; Explore</strong>&lt;br&gt;Identify a specific behaviour to the either encouraged or discouraged</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>Break</td>
</tr>
<tr>
<td>16:00 – 18:00</td>
<td><strong>Session 4.b: Explore</strong>&lt;br&gt;Explore the behavioural barriers along the user journey</td>
</tr>
</tbody>
</table>

### DAY 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:45</td>
<td><strong>Session 5: Solution design (1)</strong>&lt;br&gt;Solution ideas ideation, selection and feasibility assessment</td>
</tr>
<tr>
<td>9:45 – 10:15</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 – 12:00</td>
<td><strong>Session 6: Solution design (2)</strong>&lt;br&gt;Solution ideas refinement</td>
</tr>
<tr>
<td>12:00 – 13:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:00 – 14:00</td>
<td><strong>Session 7: Trial</strong></td>
</tr>
<tr>
<td>14:00 – 15:30</td>
<td><strong>Session 8: Trial design &amp; implementation</strong></td>
</tr>
<tr>
<td>15:30 – 16:15</td>
<td>Break</td>
</tr>
<tr>
<td>16:15 – 18:00</td>
<td><strong>Session 9: Presentations &amp; next steps</strong></td>
</tr>
</tbody>
</table>
## Annex 3 – Agenda Meeting 3

### DAY 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 – 14:45</td>
<td>Introduction &amp; objectives</td>
</tr>
<tr>
<td>14:45 – 15:30</td>
<td>What does success look like for visual cue’s legislation and for this workshop?</td>
</tr>
<tr>
<td>15:30 – 15:45</td>
<td>Break</td>
</tr>
<tr>
<td>15:45 – 16:15</td>
<td>Agenda &amp; plan for workshop</td>
</tr>
</tbody>
</table>

### DAY 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:45 – 10:00</td>
<td>Objectives chart</td>
</tr>
<tr>
<td>10:00 – 10:45</td>
<td>What does success look like?</td>
</tr>
<tr>
<td>10:45 – 11:30</td>
<td>Learning &amp; inspiration</td>
</tr>
<tr>
<td>11:30 – 11:45</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:45 – 12:45</td>
<td>Stepping into the consumers’ shoes: THINK, FEEL, ACT (working groups)</td>
</tr>
<tr>
<td>12:45 – 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30 – 14:00</td>
<td>Teams present back</td>
</tr>
<tr>
<td>14:00 – 15:15</td>
<td>Our intended outcome: THINK, FEEL, DO</td>
</tr>
<tr>
<td>15:15 – 15:30</td>
<td>Break</td>
</tr>
<tr>
<td>15:30 – 17:30</td>
<td>What could we SAY to make them THINK, FEEL, ACT according to our intention?</td>
</tr>
<tr>
<td>17:30 – 18:00</td>
<td>Summary of emerging territories from Day 2 and setting the challenge for Day 3</td>
</tr>
</tbody>
</table>

### DAY 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 – 11:00</td>
<td>Learning &amp; inspiration</td>
</tr>
<tr>
<td>11:00 – 11:45</td>
<td>Assessment of packing routes presented</td>
</tr>
<tr>
<td>11:45 – 12:00</td>
<td>Break</td>
</tr>
<tr>
<td>12:00 – 13:00</td>
<td>Ideation on visual symbol and ideation of BTL intervention</td>
</tr>
<tr>
<td>13:00 – 14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00 – 14:30</td>
<td>Present ideas back</td>
</tr>
<tr>
<td>14:30 – 15:30</td>
<td>Roadmap and resources towards a detailed design</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>Closing thoughts &amp; next steps</td>
</tr>
</tbody>
</table>
Annex 4 – Participants of Meeting 1

Ana Fazoli, Senior Program Officer Nutrition, Bill & Melinda Gates Foundation

Dr. Annet Roodenburg, Associate Professor Nutrition & Health, HAS University of Applied Sciences (Day 1 only)

Ashish Kumar Deo, Senior Advisor GAIN

Benoit de Fleurian, Chief Strategy Officer, Ogilvy One (Day 2 only)

Bethan Williams, Managing Partner, Ogilvy One (Day 1 only)

Dr Bruce Neal, Senior Director of the Food Policy Division, George Institute

Catalina Ivanovic, Consultant (Session 3 only, remote)

Dominic Schofield, Senior Technical Advisor Policy & Programmes, GAIN (Moderator)

Olufolakemi Mercy Anjorin, Project Manager, Food Fortification, GAIN Nigeria

Herbert Smorenburg, Senior Manager, GAIN Netherlands

Nigel Sunley, Sunley Consulting

Raphael Siwiti, Liaison Officer, World Food Programme Zambia

Rutger Schilpzand, Executive Secretary, Choices International Foundation

Salina Toll, Operations Director, Winward Commodities

Sarah Parkinson, (Consultant) Programme Manager Adolescent Nutrition, GAIN

Saul Morris, Director of Programme Services, GAIN

Senoe Torgerson, Bill & Melinda Gates Foundation
Annex 5 – Participants of Meeting 2

Ms. Nida Anwar, AC Nielsen Pakistan
Ashish Kumar Deo, Senior Advisor, Commercial Solutions, GAIN
Ana Fazoli, Senior Program Officer Nutrition, Bill & Melinda Gates Foundation
Mr. Nasir Habib, Communications Manager, Fire Communications
Mr. Zohaib Jamil, Metro Pakistan
Christine Kelly, Research Advisor, Behavioural Insights Team (Moderator)
Mr. Sagar Mahmood Khan, Metro Pakistan
Noor Alam Khan, SBN Coordinator, GAIN Pakistan
Mr. Waqar Ullah Khan, Liaison Officer, KP Food Safety & Halal Food Authority FS & HFA
Shakeel Khan, Businessman/Shop Keeper, Afsar Khan General Store
Laura Litvine, Advisor, Behavioural Insights Team (Moderator)
Mr. Ijaz Nawaz, Deputy Director Operations, Punjab Food Authority (PFA)
Mr. Malik Muhammad Waseem Nawaz, Brand Manager Volka Foods
Mss’ Marhaba Niazi, Deputy Director Technical, Punjab Food Authority (PFA)
Qaiser Munir Pasha, Country Director, GAIN Pakistan
Laura Platenkamp, Associate Urban Nutrition, GAIN
Sarah Parkinson, (Consultant) Programme Manager Adolescent Nutrition, GAIN
Faiz Rasool, Senior Programme Manager, GAIN Pakistan
Mr. Muhammad Shoaib, Director Admin, KP Food Safety & Halal Food Authority FS & HFA
Annex 6 – Participants of Meeting 3

Hafiz Qasir Abbas, Head of Communications (DPR), Punjab Food Authority (PFA)
Akbar Iftikhar Ahmed, Deputy Director Inspections & Operations (HQ), KP Food Safety & Halal Food Authority FS & HFA
Muhammad Ahmad, Media Manager, Interflow Communications
Muhammad Irfan Khalid Amin, Dr Dir Implementation & Coordination, Punjab Livestock Department
Mian Nadeem Anwar, Punjab Food Authority (PFA)
Khalid Mahmud Chaudhry, Ad Sec Planning, Punjab Livestock Department
Ashish Kumar Deo, Senior Advisor, Commercial Solutions, GAIN
Rafia Haider, ADG Operations, Punjab Food Authority (PFA)
Muhammad Irfan, Head of Milk Project, Punjab Livestock and Dairy Development Board
Khalid Iqbal, Director Operations, KP Food Safety & Halal Food Authority FS & HFA
Muhammad Jamal, Marketing/Campaigns Manager, Interflow Communications
Siddharth Kanoria, Quantum Consumer Solutions
Noor Alam Khan, SBN Coordinator, GAIN Pakistan
Sheikh Rehan Khaliq, CEO, Promotion Plexus
Riaz Khan Mahsud, Director General, KP Food Safety & Halal Food Authority FS & HFA
Ali Mahiudin, Administrative Officer, GAIN Pakistan
Shahid Inayat Malik, ADG Licensing, Punjab Food Authority (PFA)
Muhammad Nasir, Senior Manager, ENGRO Foods
Mr. Malik Muhammad Waseem Nawaz, Brand Manager Volka Foods
Qaiser Munir Pasha, Country Director, GAIN Pakistan
Aina Rafique, Food Safety Officer, Head Quarter, Punjab Food Authority (PFA)
Faiz Rasool, Senior Programme Manager, GAIN Pakistan
Muhammad Nazir Satti, Senior Manager Finance & Admin, Punjab Livestock and Dairy Development Board
Mr. Muhammad Shoaib, Director Admin, KP Food Safety & Halal Food Authority FS & HFA
Muhammad Usman, Director General, Punjab Food Authority (PFA)
Ajay Ravi Varma, Quantum Consumer Solutions