



# Disability Inclusion Framework & Guidance

ELAN 1.2



**Adam Smith**  
International

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## Acronyms/Abbreviations

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<b>CBT</b>	Cross-Border Trader
<b>DCED</b>	Donor Committee for Enterprise Development
<b>DFID</b>	Department for International Development
<b>DRC</b>	Democratic Republic of the Congo
<b>GESI</b>	Gender Equality and Social Inclusion
<b>ICF</b>	International Classification of Functioning, Disability and Health
<b>LNB</b>	Leave No-one Behind
<b>M4P</b>	Making Markets Work for the Poor
<b>MRM</b>	Monitoring and Results Management
<b>MSD</b>	Market Systems Development
<b>NGO</b>	Non-Governmental Organisation
<b>PSD</b>	Private Sector Development
<b>PWD(s)</b>	Person(s) with Disabilities
<b>SHFs</b>	Small Holder Farmers
<b>SIID</b>	Social Inclusion Intervention Design
<b>SME</b>	Small and Medium Enterprise
<b>WHO</b>	World Health Organisation

# 1 Executive Summary

The rise of market systems development (MSD) programming in the field of private sector development has coincided with an awakening of the field to the importance of more equitable development reflected in the increasing program commitments to gender equality and social inclusion (GESI) with people with disabilities often being captured through the broader social inclusion category. The concept of disability inclusion, however, is still new to most MSD programs and practitioners including Elan 1.2, a DFID funded MSD program implemented by Adam Smith International in the Democratic Republic of the Congo (DRC).

This framework and guidance draw from the lessons learnt from the modest body of existing literature<sup>1</sup> and examples of disability inclusion in market systems development and good practice from the private sector and is adapted to the DRC context and MSD methodology. The key take-aways of the guidance include:

## Understanding disability



Disability is a result of personal medication conditions and the barriers which limit individuals to fully participate in the society.



Disability is diverse, across different domains and severity. It is not a yes or no question but a question of severity in different contexts.



A large proportion of the disabled may not even self-identify as disabled, due to which the prevalence can be underestimated.



An estimated 11 million PWDs live in the DRC, or around 13% of the total population, though this number is likely very conservative.

## Market systems development and disability inclusion

- Poor are a diverse group of people both as suppliers and customers, as such, have varying needs and capabilities.
- Recognising and responding to the varying degrees of capabilities in the markets mitigates the risks of limited uptake of new products, services, regulations or business models and expands the market outreach of businesses.
- The objective of disability inclusion is not to enter market systems that exclusively cater to the PWDs (unless the program goals are geared towards that), but to maximise the participation of PWDs in the markets that have been selected based of their relevance, opportunities and feasibility for poverty alleviation.
- Market Systems Analysis and commercial viability underpins the implementation of the disability inclusion framework.
- Given the diverse and invisible nature of disability, the approach to expanding inclusion is through low cost tweaks to commercially viable designs to expand their outreach.

This document is organised in three sections: 1) Understanding disability 2) market systems development and disability inclusion 3) disability inclusion in Elan 1.2's interventions. It is intended primarily for Elan 1.2 staff and partners.

<sup>1</sup> <https://static1.squarespace.com/static/5bc4882465019f632b2f8653/t/5e73565f1fbfd37a72ac63f/1584617086596/Literature+Review+People+with+Disabilities+in+MSD.pdf>

## 2 Understanding Disability

### 2.1 Defining disability

Disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others<sup>2</sup>.

**Disability is not a person’s health condition; it is the inability of an individual to perform a function due to a long-term impairment.** That is, functioning and disability are results of the interaction between the health conditions of the person and their environment<sup>3</sup>.

This understanding is particularly important for the purposes of promoting inclusive economic development, as it is more appropriate to view disability as a reduced ability to undertake “activities” and “participation” resulting from functional limitations, rather than as a diagnosis of a medical condition<sup>4</sup>.

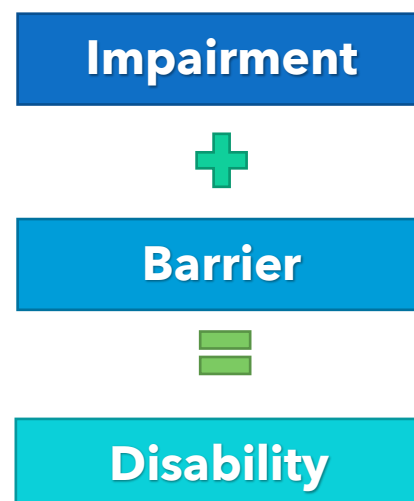
In other words, the more a person is able to participate in society, the “less disabled” a person is. For instance, a person with a hearing impairment (e.g. cannot hear at all) is disabled only if they can’t participate in activities such as communicating with family members, accessing information or trading in a market. However, if the same person can communicate with family members through sign language, can access information by reading it or use sign language in a market is not disabled as he is able to perform the activities the same as a person without a hearing impairment.

The functional theory of disability puts the burden of inclusion on the environment as opposed to a person’s medical condition. It is the combination of both the medical condition and the environment around that person which is responsible for disabling the person.

### 2.2 Disability continuum

The International Classification of Functioning (ICF), or WHO’s framework of measuring health and disability in populations “treats **disability as a continuum rather than categorizing people with disabilities as a separate group: disability is a matter of more or less, not yes or no**”.<sup>5</sup>

ICF measures each functional domain based on the level of difficulty an individual faces performing that function. For instance, a person’s ability to walk is measured based on whether the person has some difficulty in walking (mild difficulty), a lot of difficulty in walking (severe difficulty) or cannot walk at all (severe difficulty). Some individuals also



<sup>2</sup> United Nations. (2006). Preamble from Convention on the Rights of Persons with Disabilities (CRPD)

<sup>3</sup> World Health Organization. (2011). World report on disability.

<sup>4</sup> Mont, D. (2007, March). Measuring Disability Prevalence. World Bank

<sup>5</sup> World Health Organization. (2011). World report on disability

face difficulties occasionally but not consistently, which have put in the minimal difficulty category.

It is important to understand and acknowledge this continuum as people with mild difficulties and severe difficulties, who are still mobile, have some vision, some hearing ability or cognitive abilities may still not be able to fully participate in the society and be excluded.

## 2.3 Inclusion vs. Specialist Designs

WHO estimates that 1 billion people are disabled in the world, of which an estimated 20% are severely disabled and 80% have less severe or mild or no difficulties.<sup>6</sup>

**The majority of the disabled do not fall in the severely disabled category and a large proportion of them may not even self-identify as disabled.<sup>7</sup>**

It is this large proportion of the market which can be facilitated to participate more in the markets that economic development programs operate in, while specialist programs can be designed for the top of the pyramid, particularly when they are not already participating in markets.

Almost everyone will be temporarily or permanently impaired at some point in life, and those who survive to old age will experience increasing difficulties in functioning.

Rates of disability are increasing and the most common factors contributing to the increase are an aging global population and increase in chronic health conditions<sup>8</sup>.

Designing for disabled has benefits not only for PWDs but also for people who may be facing situational or temporary disabilities.

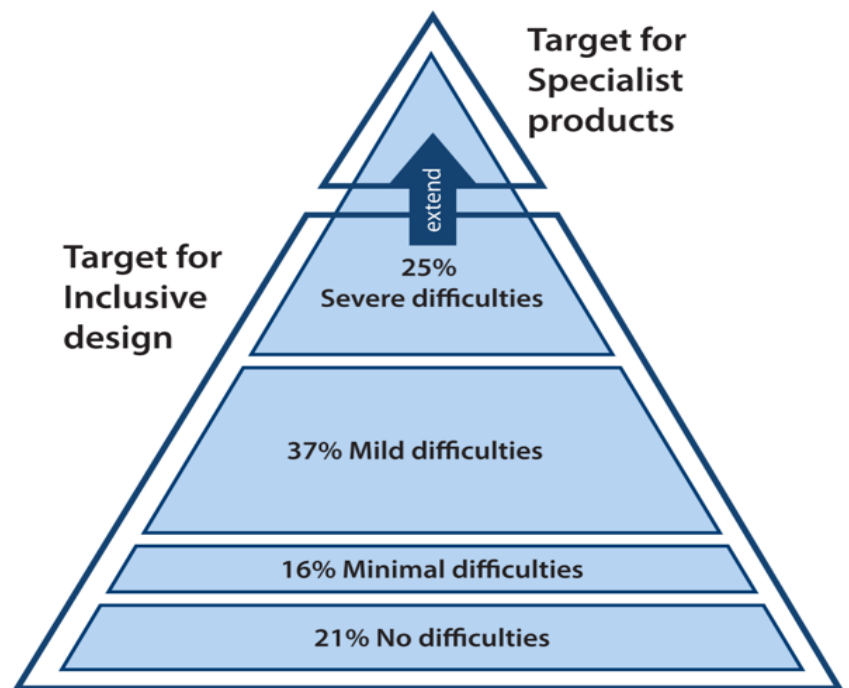


Figure 1: The continuum of disability diversity, based on US data collected by Microsoft. Sourced from: Inclusive Design Toolkit, University of Cambridge.

<sup>6</sup> WHO Factsheet (Retrieved, 2020) <https://www.who.int/en/news-room/fact-sheets/detail/disability-and-health>

<sup>7</sup> Microsoft Corporation, (2003). The Wide Range of Abilities and its Impact on Computer Technology

<sup>8</sup> WHO Factsheet (Retrieved, 2020) <https://www.who.int/en/news-room/fact-sheets/detail/disability-and-health>

## 2.4 The Domains of Disability



Six core domains of functionality are assessed to determine whether a person is disabled or not. Each domain is assessed based on the extent of the ability for an individual to perform the function.

The domains were developed by the Washington Group, a United Nations Statistics Commission Group with the support from independent agencies and bilateral groups.

The six core functional domains include **mobility, vision, hearing, communicating, cognition and self-care**. The tool to identify disability has responses based on each of the level of functionality on each of the domains. For instance, on mobility, the questionnaire asks if the person has difficulty in walking or climbing steps, the responses can be:

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do

For the questions, it is explicitly enquired if these difficulties are caused due to a health problem.<sup>9</sup>

## 2.5 Disability in the DRC

While there is lack of any official reliable data on disability, some studies in sample districts put the figure at 11% of the population.<sup>10</sup> According to DRC's Ministry of Health, an estimated 11 million PWDs live in the country, or around 13% of the total population.<sup>11</sup>

The 11-13% is consistent with UN statistics on disability in African, however, a source in WHO source maintains that an estimated 40% of Africa's population consists of PWDs.

The lack of reliable data combined with the nature of disability, where a large proportion may not self-identify



<sup>9</sup> Washington Group, Short Set of Questions on Disability. Retrieved from: <http://www.washingtongroup-disability.com/wp-content/uploads/2016/01/The-Washington-Group-Short-Set-of-Questions-on-Disability.pdf>

<sup>10</sup> SIDA, (2014). Disability Rights in Democratic Republic of Congo

<sup>11</sup> Africa News, (2018), Fighting prejudice around disability with modeling in DRC

as disabled makes it challenging to determine the size of PWDs in DR Congo.

While there is a lack of data on disability, there are indications that its prevalence may be higher than expected. One such indication comes from See International which states that 70% of Congolese people have little or no access to health care facilities.<sup>12</sup> This can increase the incidence of both temporary and long-term disabilities, especially when potentially curable or preventable diseases are not treated.

### What health problems cause the most disability?

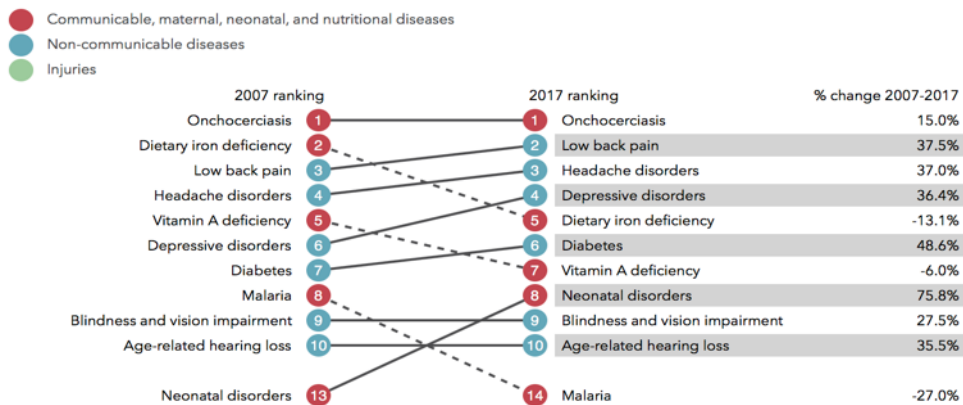


Figure 3: Health causes leading to disability in DR Congo, 2018.

Traffic incidents, for instance, are seen as major causes of disability in the country; however, data suggests that the key cause are health related, including onchocerciasis (river blindness), back pain and depressive disorders (Figure 3).<sup>13</sup>

## 2.6 Key takeaways



**Disability is a result of personal medication conditions and the barriers** which limit individuals to fully participate in the society.



**Disability is diverse**, across different domains and severity. It is not a yes or no question but a question of severity in different contexts.



**A large proportion of the disabled may not even self-identify** as disabled, due to which the prevalence can be underestimated.



**An estimated 11 million PWDs live in the DRC**, or around 13% of the total population, though **this number is likely very conservative.**

<sup>12</sup> African Studies Centre Leiden, (2018). Disability in Africa.

<sup>13</sup> Institute of Health Metrics and Evaluation, (2018). Democratic Republic of Congo.



## 3 Market Systems Development and Disability Inclusion

### 3.1 Why Disability Inclusion is Important for Markets

MSD practitioners view the poor as active economic actors in market and the premise of their work is to ensure that the poor can take advantage of the economic and growth opportunities. Poverty is seen as a consequence of markets not performing well due to a variety of reasons. Springfield Centre's Operational Guide for the M4P Approach states,<sup>14</sup>

*“Economic growth (the main contributor to poverty reduction) and expanded access to basic services are critical in developing competitive and inclusive economies. These, in turn, require:*

- *Systems for the exchange of goods, services and commodities that operate efficiently for everyone but especially the poor as consumers, producers or employees*
- *Systems for the delivery of basic services, such as education, health and water, that can build people's capacities to escape poverty.”*

The aim of practitioners has been to transform the systems in the markets that the poor operate in to increase their income. As the approach has evolved over time, practitioners have started recognizing that systems have different effects on different groups of the poor, and that the poor are not one homogenous group.

This recognition has stressed **the need of understanding the nuances within the poor when understanding their interaction with the markets to achieve broader inclusivity**. This has strengthened the work on women inclusion in markets and selecting markets that are more relevant for marginalized groups as people living in remote regions, specific ethnic groups or people belonging to specific age groups.



<sup>14</sup> The Springfield Centre (2015) The Operational Guide for the Making Markets Work for the Poor (M4P) Approach, 2nd edition funded by SDC & DFID

## 3.2 How to Approach Disability Inclusion in MSD Programmes?

**Effective MSD starts from good diagnosis of the constraints in a market, including a fair understanding of the poor that are to be benefitted.** As discussed, a nuanced understanding of the different segments of poor is becoming increasingly recognised to achieve inclusive results.

**Disability, unlike other segments, is not easily identifiable.** It is invisible to an extent that the disabled individual may not always identify themselves as disabled. To address this invisibility, WHO and United Nations formed the questionnaires to identify disability; however, for MSD programmes, interviewing potential beneficiaries to ascertain the prevalence of PWDs in a market will either be impossible or highly costly.

In a context, where Microsoft finds more than 60 percent of working adults in the US to potentially benefit from accessible technologies, also makes it a segment of a market which can't be completely ignored.

Moreover, even if the percentages are lower in DRC (albeit, unlikely given lower access to medical care) as compared to the study conducted in the US, **it is difficult to determine if a large proportion of the disabled form the early adopters of new technology or a business model.**

**This is particularly important for MSD programs as they aim to change behaviour through innovation, and the success of the innovation depends on early uptake by the potential beneficiaries.** A business strategy that sees its market to be homogenous and not cater for the needs of different segments, may miss out on the potentials of sizeable early uptakes as the early adopters could well be the seemingly smaller segments of the market.



Catering for the needs of different segments, including improving accessibility for the disabled can not only set the innovation to achieve larger scale but can also mitigate the risks of not having a sizable uptake in the first place. **The success of innovations is not dependent on economic incentives alone, but being aligned to non-monetary needs of the diverse segments of the poor.**

### 3.3 Is there a Business Case for Disability Inclusion?

In addition to the potentially large size of PWDs, designing for disability inclusion can cater to a wider range of customer segments. For instance, in a US based study it was found when 26,000 people were identified as being permanently disabled with one arm, for the same market an estimated 21 million people faced either temporary and situation disability that led them to having similar constraints to that of people with one arm.<sup>15</sup>

#### Permanent Disability



One arm

#### Temporary Disability



Arm injury

#### Situational Disability



New parent

The figure on the left<sup>16</sup> illustrates how people with permanent, temporary or situational disabilities all have limited functionality. New parents or pregnant women are not able to perform functions as carrying heavy loads or walking long distances much like people with permanent disabilities. Hence a design which is meant to improve access can benefit people who may not be permanently disabled.

While the outreach of a product or service can benefit from having accessible designs, as discussed earlier, it is also important to recognise that also acts as a risk mitigation strategy to increase the number of potential users at the adoption stage for a new product or a service.

Given the diverse nature of disability and its invisibility, product and service designs need to take intuitive approaches to inclusion to ensure wider adoption, keeping in view the different domains of disability and its different levels of severity.

### 3.4 Market Systems Analysis for Disability Inclusion

MSD approach sees poverty and marginalisation as a result of systems that are not working for the poor or the marginalised. Similarly, disability is the result of the environment that is not inclusive of the people with medical conditions. **The objective in both cases is to make the systems or the environment around the target group more inclusive.**

<sup>15</sup> United States Census Bureau, Limbs for Life Foundation, Amputee Coalition, MedicineHealth.com, CDC.gov, Disability Statistics Center at the UCSF

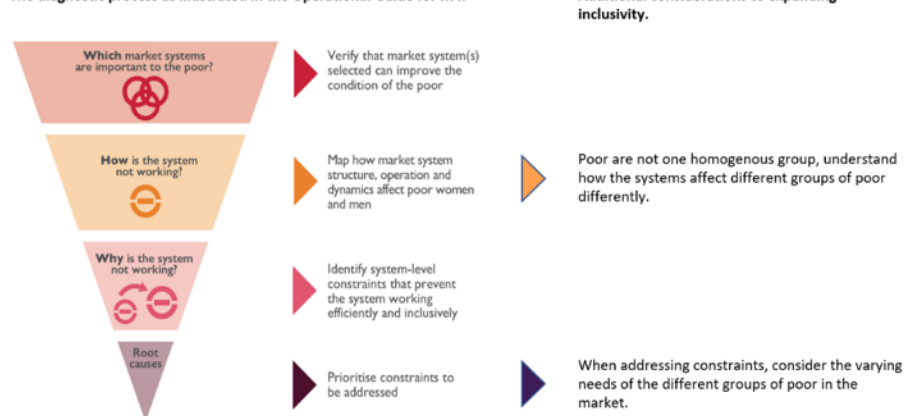
<sup>16</sup> Adapted from inclusive Design Toolkit by Microsoft Inc.

**To achieve disability inclusion, the core analysis of the market system will remain, though with an additional understanding of the exclusions that can happen when commercially viable innovations are introduced to make the market function better.**

As part of the analysis it is important to:

- Understand the market system and its relevance to different groups
- Understand how the performance of the market system affects different groups and why
  - *Constraints from both supply and demand side*
- Define the market system change intended
- Identify potential entry points for inclusion taking into consideration the design factors from the demand and supply side – question the business case

The diagnostic process as illustrated in the Operational Guide for M4P<sup>8</sup>



- Define the expected behaviour change(s) if the market starts to function better for different market actors and target groups

The diagram (left)<sup>17</sup> shows the expanded diagnostic process for MSD program to take into account inclusivity considerations.

## 3.5 Elan 1.2

ELAN 1.2 forms part of DFID DRC’s Private Sector Development (PSD) programme of £102 million (2013 to 2023). *The programme aims to reduce poverty by increasing the incomes of one million poor people, promoting economic opportunities and improving access to markets and services.*

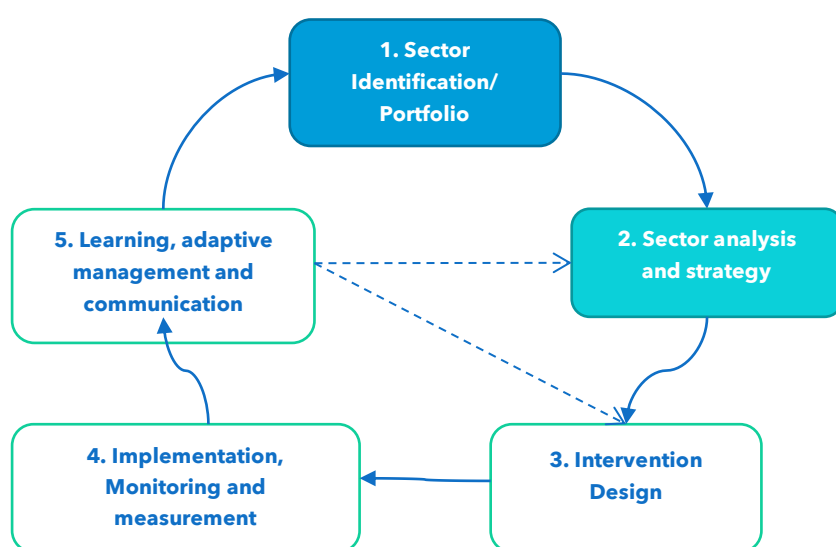
ELAN 1.2, is designed to be large and adaptive, tackling private sector challenges from several angles, across a broad range of sectors and regions. The intended outcome of the programme is to substantially improve *the performance and position of poor people within selected market systems.*

The selected market systems include Agriculture (Perennial and Non-Perennial), Renewable Energy, Cross Border Trade, Markets in Crisis and Financial Inclusion.

<sup>17</sup> <sup>8</sup>The Springfield Centre (2015) The Operational Guide for the Making Markets Work for the Poor (M4P) Approach, 2nd edition funded by SDC & DFID

ÉLAN applies the market systems development methodology to its interventions, aiming to work through indigenous market actors to bring about systemic change rather than intervening directly in the market. During the early stages of project intervention, the focus is on encouraging partners to “adopt” pro-poor changes and then subsequently “adapt” the changes independently to suit the market(s) in which it is operating. The theory of MSD then posits that other, competing actors will copy the pro-poor change or offer a variant of it – “expand” and that non-competing actors will “respond”, changing their behaviour as a reaction to this.

### 3.6 Disability Inclusion in the Programme Cycle



Élan RDC Programme Cycle

Élan selected the market systems to work in based on their relevance to the poor in DRC, the opportunities of the market system for growth and the programme’s feasibility to influence change in the system.

The program has then gone through an in-depth analysis of the market system to identify the root causes that are impeding inclusive growth and is now in the stage of designing, implementing and monitoring the interventions.

This guide focuses more on those latter stages of the program cycle as opposed to the sector identification and analysis stage.

For a programme to implement disability inclusion at sector identification stage it needs to acknowledge the invisible nature of disability. **Disability is a spectrum of ability of people to perform different functions, hence the identification of disability requires individual abilities.** This means that while aging and prevalence of chronic diseases do indicate possibility of disability, it is almost impossible to identify disability by just looking at an individual.

The invisibility of disability prevalence makes it a costly and an intensive exercise to identify for early sector identification where Elan 1.2 has limited interaction with potential beneficiaries. At this stage, programme can look at secondary data for the prevalence of elderly or chronic diseases in the sectors it can potentially be involved in to assess the potential prevalence of PWDs in the market. To reach a larger number of PWDs,

programmes may decide to add sectors that have high potential prevalence, however, that does not exclude the designing disability inclusive interventions for sectors where the prevalence may not be evident, based on the potential benefits and risk mitigation as discussed earlier.

A more in-depth analyses can come in at sector analysis level, where the roles in the households are understood and key functions in a market are identified, which can be transformed to unlock sector's growth potential. The following sections provide guidelines on intervention design and the following stages, as relevant to Elan's work.

### Steps for designing disability inclusive interventions



The sector selection and analysis stage supports the identification of the market systems to focus on to unlock inclusive growth opportunities while **intervention design stage** is critical as part of the program life cycle to identify entry points to address those set of constraints.

Interventions are aimed at value creation for the partners in the form of monetary or less tangible non-monetary outcomes. Partners agreement to invest resources to change their behavior is led by the objective of creating more value for themselves and Elan's inclusion work needs to be aligned to facilitate that objective.

**Elan's Disability inclusion frameworks aims at increasing the market outreach of its partners and mitigate their risks.** Élan mitigates these risks by cost sharing with partners, but more so by providing market intelligence and bringing the broader market understanding on the table with partners.

The distinction between designing interventions for the disabled vs **designing interventions that are inclusive of disabled is critical at this stage**; as the interventions will not undermine the market systems analysis carried by the programme or the identified constraints that are impeding inclusive growth, instead **the aim is to expand the inclusion when designing the intervention** based on the previously done analysis.

Given the high cost and resources required to determine the size of the disabled segment in a market and the benefits of having more accessible innovations, Élan will use a **Social Inclusion Intervention design tool (step 4.1)** for all interventions to ensure inclusion and expand partner outreach. The following section explains the foundation and the application of the tool.

### 3.7 Social Inclusion Intervention Design Tool

Élan’s **Social Inclusion Intervention Design** Tool is built on Universal Design principles and uses the Washington Group disability identification tool’s domains to facilitate thinking across different relevant functions. The tool is used as part of the disability inclusive intervention design process to identify relevant entry points with partners.

#### Overview of Social Inclusion Design Tool

Functional domains	Relevance for interventions
Mobility	<i>Physical Access to Product/Service</i>
	<i>Physical Access to Information</i>
	<i>Physical efforts for behaviour change</i>
Hearing	<i>Access and understanding of information</i>
Vision	<i>Visibility of information</i>
	<i>Precision needs of behaviour change</i>
Cognition	<i>Complexity of Information and behaviour change</i>

The tool uses **four functional domains** considered to be the most relevant for adoption of new technology or changing economic behaviours and provides questions against each function required to be performed by the potential beneficiaries to benefit from the intervention. Based on the responses against relevant domain, measures are taken to improve accessibility or mitigate any exclusion risks through the intervention design.

For example, under ‘mobility’ it is critical to question if the product requires the beneficiaries to put additional physical effort than what they put currently. The response would then trigger design considerations for equitable use, flexibility or level of physical effort required, etc.

The rationale to use the tool on the four functions as illustrated is based on their relevance to social exclusion, **the tool facilitates the inclusion of a large proportion of PWDs but not all PWDs.**

Élan aims to **make innovation in markets more inclusive towards PWDs who are already participating in the markets, as opposed to bringing PWDs into markets they are not already engaged in,** as that would require specialist interventions and not be aligned with the growth constraints as identified in the market analysis.

An example would be disabled coffee farmers, for whom the market system constraints may be amplified due to their disability, for such farmers the program aims to ensure their access to interventions that address the market constraints.

Communication impairment is not included in the tool as it covers access to information across mobility, hearing, cognition and vision already, which can benefit people who may have difficulty in understanding. Self-Care impairment is not included as the impairment to care of one's self may not impede a person ability to benefit from Elan's interventions, or the design changes required to include such people will be beyond the scope of the interventions, as the PWDs with the impairment may not be a participant in a market.

Once the entry points are identified across different functions for the intervention, it is then critical to inform the product/service design that ensures inclusivity towards PWDs; is commercially viable and contributes to addressing market constraints. At this stage, application of the **Universal Design Principles** takes effect to account for the factors that are relevant for inclusive product/service design or business model. It aims to help identify the changes needed to make the product/service design more inclusive in order to address the relevant functional domain (mobility, hearing, vision and cognition) as identified using the SIID tool.

The Center for Universal Design at the North Carolina State University define Universal Design as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design".<sup>18</sup>

Through the incorporation of these principles in the SIID tool, Élan aims to increase the accessibility of the innovation it facilitates in the markets while recognising that not all market system changes will be relevant for all marginalised groups. Given the aim of the tool is making interventions easier to adopt, **it aims to benefit not only PWDs but is inherently more gender inclusive, as women face multiple situational disabilities due to the additional roles they play in the households.**

Women and PWDs will remain the two constant groups that all innovations will aim to be inclusive towards, however, the tool can be used to add other relevant groups to interventions to expand their reach to diverse groups.

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<sup>18</sup> CUD. (2017). *The Center For Universal Design*.



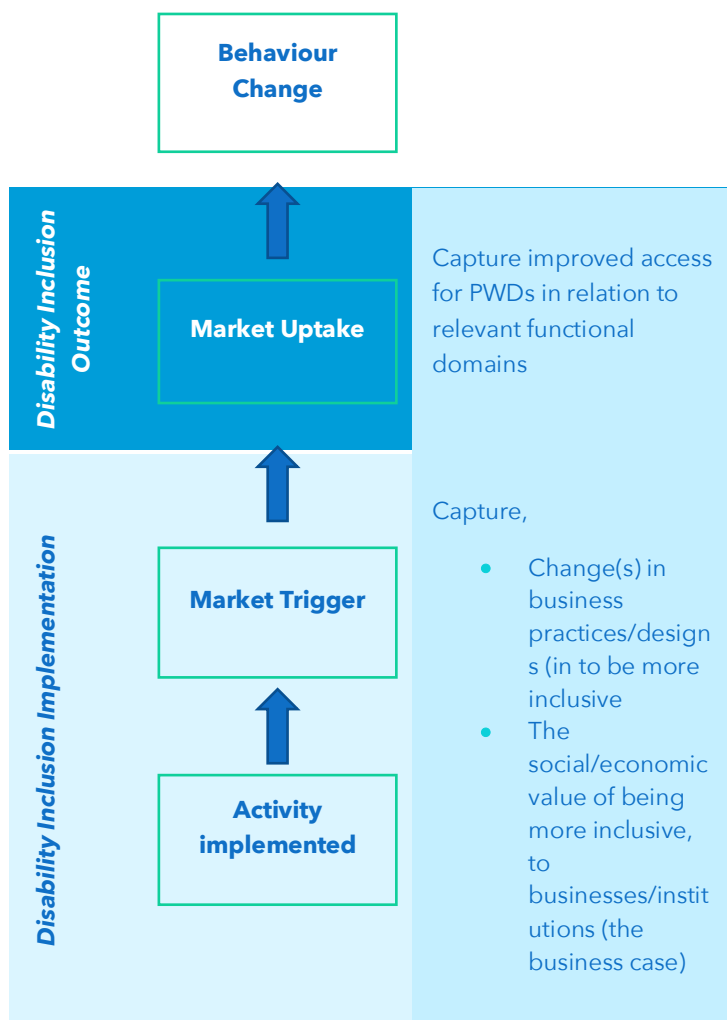
For instance, for 'Equitable Use', if a new seed requires increased application of fertilisers, intensive weeding and more water, then thinking if all relevant groups would be able to put in additional efforts helps Élan to ensure that while the monetary incentives may be present, the ability of potential users to actually put in more physical effort is present in the target locations.

<b>UD Principle</b>	<b>UD Objective</b>	<b>Relevant Functional Domain in SIID Tool</b>
<b>Equitable Use</b>	The design is useful and marketable to people with diverse abilities.	<i>Mobility</i>
<b>Flexibility in Use</b>	The design accommodates a wide range of individual preferences and abilities.	<i>Mobility</i>
<b>Simple and Intuitive Use</b>	Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.	<i>Cognition</i>
<b>Perceptible information</b>	The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.	<i>Hearing, Vision, Cognition</i>
<b>Tolerance for error</b>	The design minimizes hazards and the adverse consequences of accidental or unintended actions.	<i>Vision, Cognition</i>
<b>Low Physical Effort</b>	The design can be used efficiently and comfortably and with a minimum of fatigue.	<i>Mobility</i>
<b>Size and Space for approach and use</b>	Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.	<i>Mobility</i>

### 3.8 Implementation, Monitoring and Measurement

As elaborated earlier, disability is the combination of individual’s medical conditions and the environment. If the environment is made suitable for the individual to participate in and function, the individual’s ability to benefit from the economic opportunity and growth is enhanced despite having the medical condition.

Élan’s interventions are a part of that environment that PWDs may participate in, and if they are suitable for individuals with diverse abilities to take advantage of, they then are **not** disabled in the context of the intervention and would be on the same level as other marginalised beneficiaries of that intervention.



Reducing environmental barriers in the context of the interventions is what Élan aims to achieve through its interventions, and hence this reduction in barriers becomes the change that it will measure and report on for its disability inclusion work.

As mentioned previously, the results chain is a key tool to outline the key changes including the intended outcome for the disabled. The environment for a PWD to benefit from the intervention is when the intervention partner interacts with the beneficiaries, either through the provision of a product or a service, or through a new business model. Therefore **measurement will be at two levels:** (1) Changes in practices/business model at the

business/institutional level to be more inclusive and (2) Changes in terms of PWDs ability to access the innovation resulting in reduced barriers for them to operate.

Thus, Élan will measure and report on the number of the businesses that tweaked their designs and the type of changes made to expand their reach to people with diverse abilities and the effect of the design tweaks in improved creating access and enterprise performance for PWDs.

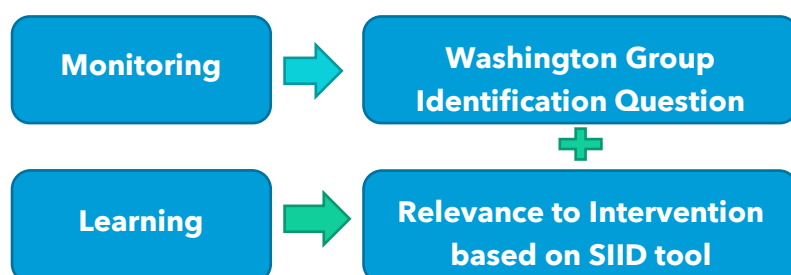
**Assessing the design tweaks will be based on the considerations in SIID tool** and the eventual design of the intervention, whereas, **the effectiveness of the design tweaks will be gathered through interviews with the respondents as part of the monitoring activities.** Both qualitative and quantitative information will be gathered as appropriate.

To assess the effectiveness of the design tweaks, two key steps are required.

- Identification of PWDs among the respondents in monitoring visits
- Assessing whether they were able to access the innovations that the intervention introduced.

Both these elements are critical to monitor and learn for Elan’s disability inclusion approach. The value of only including the identification tool in the monitoring visits helps Elan to report on the number of PWDs who are able to access the innovations, however, the opportunity to improve the interventions is missed.

For identification, Elan will use the Washington Group disability identification tool as it acknowledges the diversity as well as the invisibility of disability. Elan will use four questions from Washington Groups short set of questions, as relevant to the SIID tool for the reasons of their relevance to Elan’s intervention and Elan’s potential to positively influence change on those functions. The four questions will be on the four functions as



outlined in the SIID tool, including mobility, vision, hearing and cognition.

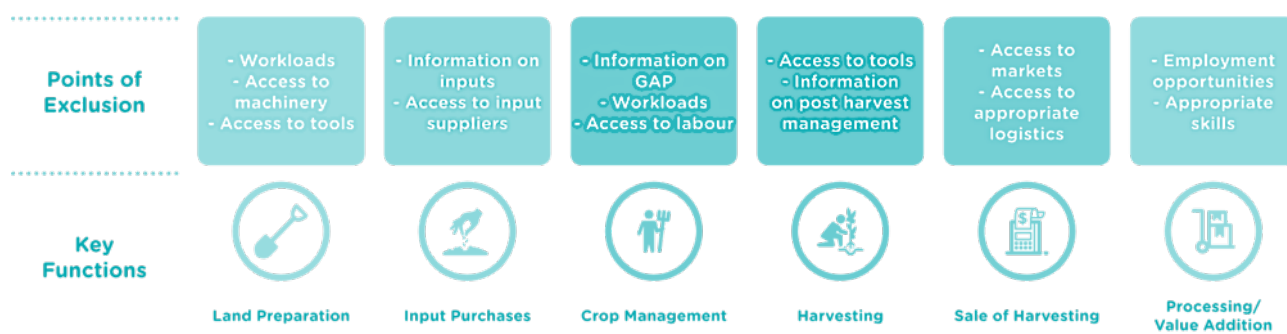
Where an individual with an impairment is identified, follow up questions on their ability to access the innovations will be added in

the monitoring visits. For instance, a farmer who is identified with a vision impairment in an assessment of an agriculture intervention aiming to change practices of farmers, the program will assess if the person, despite the vision impairment, has been able to access the information as provided by the partner. The follow up question ensures that the intervention is providing the suitable environment for the farmer to participate in that intervention, and hence reduces the barriers in the environment of the disabled farmer.

If an intervention is aimed at changing the behavior of the farmers from using self-selected seeds to using improved seeds, then the program will look at the different functions involved to adopt that change and identify potential exclusion points. The illustration above exhibits potential exclusion points in a given crop cycle.

Elan does not intend to include PWDs who were not planting the said crop before the intervention but to change the practices of those who already were planting the self-selected seeds (unless the aim of the intervention is to actually increase the number of farmers growing a particular crop). In such a case the potential functions can include

being aware of the new seed variety and its benefits, having access to the seed, the seed requiring any change in crop management practices etc. The underlying rationale of the sector strategy and commercial viability remains the same, however, the aim is to make the intervention more inclusive.



### Example of combining Monitoring and Learning

In such a scenario, each functionality question may have implications on the success of the intervention, particularly if people who are unable to perform a particular function due to a health condition, are a significant segment of the market. The table below gives an example of combining questions of relevance (or on learning) with the functional domains being covered in the SIID tool.

Domains	Relevance (if any answer other than no difficulty)
<b>Vision</b> - Do you have difficulty seeing a face on a coin or a person's face across the room? (even when wearing your glasses)	Have you seen the brochures distributed on the new seed?
<b>Hearing</b> - Do you have difficulty hearing in a quiet room? In a noisy room? (even when using hearing aid)	Did you get the information provided in the extension meeting?
<b>Mobility</b> - Do you have difficulty walking or climbing steps? Do you have difficulty working on the farm?	Can you go to the inputs store to purchase the seeds? Has the difficulty affected your decision to use the new seeds?
<b>Cognition</b> - Do you have difficulty in concentrating or remembering things that are shared with you?	Do you remember the information provided on the new seed?

### 3.9 Key takeaways



**The poor are a diverse group** of people both as suppliers and customers, as such, have varying needs and capabilities.



**Recognising and responding to the varying degrees of capabilities in the markets mitigates the risks** of limited uptake of new products, services, regulations or business models and expands the market outreach of businesses.



**The objective of disability inclusion is not to enter market systems that exclusively cater to the PWDs** (unless the program goals are geared towards that), **but to maximise the participation of PWDs** in the markets that have been selected based of their relevance, opportunities and feasibility for poverty alleviation.



Given the invisibility of disability, **it is challenging to determine the prevalence of disability**. Aging and chronic health conditions are key causes to disability. The two can be indicators of disability prevalence in a market, however, it is safer to assume the prevalence in all markets.



The **two most critical stages** of programme cycle to incorporating disability inclusion are at the **intervention design stage and monitoring stage**.



At the intervention design stage, **the aim of the tool developed by Elan is to increase the reach of interventions to PWDs**, and will not reach all PWDs given the highly diverse nature of disability.

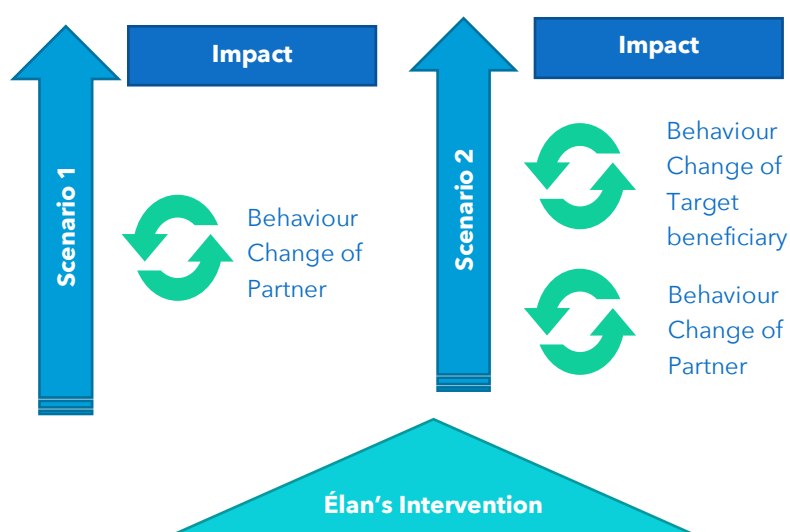
## 4 Implementing the Disability Inclusion Framework – Elan 1.2 Interventions

Elan’s portfolio (Elan 1 and 1.2) comprises of more than 100 interventions across four sectors.<sup>19</sup> While the nature of the interventions vary based on the needs of the different sectors, the mechanisms through which these interventions interact with the target beneficiaries include:

1. Improving the capacity of an advocacy group or regulatory change
2. Improving business advisory for businesses
3. Improving production/processing capacity of businesses
4. Improving dissemination of information to target beneficiaries
5. Introducing new product/services to target beneficiaries
6. Improving distribution of a product/service to target beneficiaries
7. Improving aggregation services for target beneficiaries

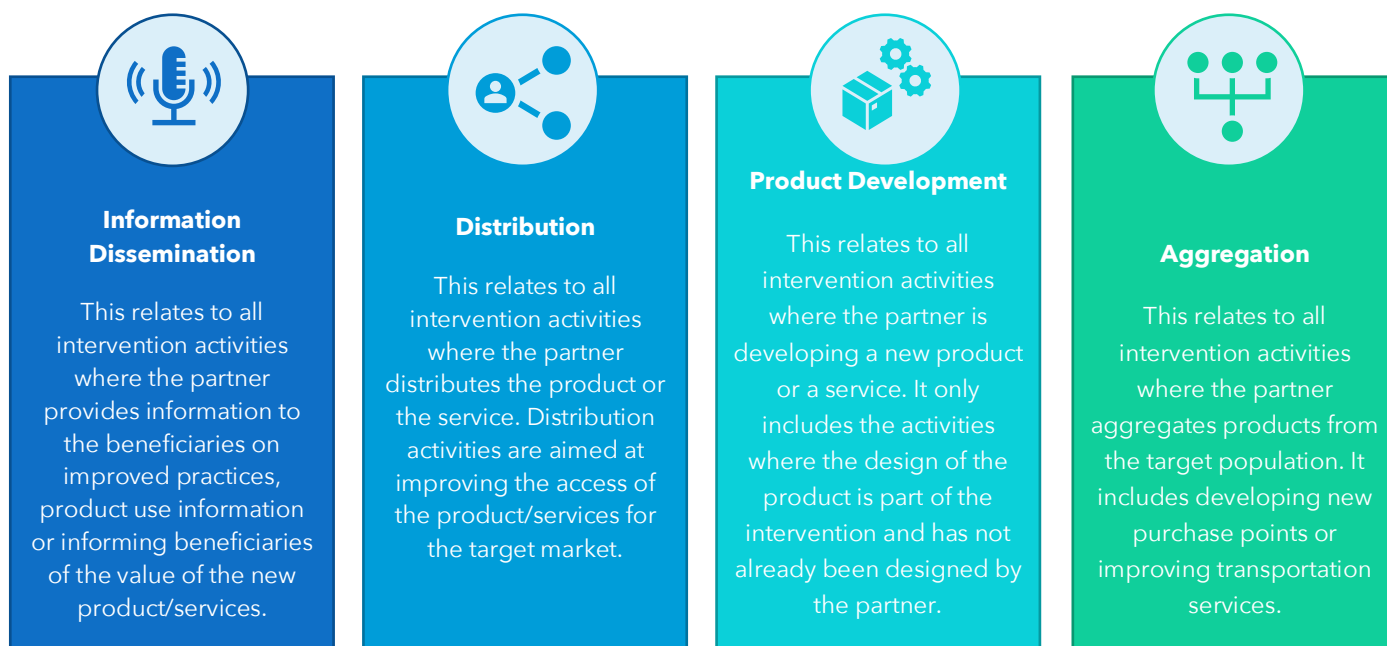
The **first three mechanisms** reach the target beneficiaries through improved capacity of institutions or businesses, whereas, **the last four** aim at improving the capacity of beneficiaries through partners. When Categorised into these two broad umbrellas, 82% of Elan’s phase 1 interventions and current pipeline aim at improving the capacity of beneficiaries through the partners, whereas, the remaining 18% aim to achieve impact directly through the change in behaviour of partners alone.

As illustrated, the first three mechanisms lead to impact through changing the behaviour of the partners or institutions without any change in the behaviour of the beneficiaries. Whereas, in the second scenario, the change is achieved by changing the behaviour of the target beneficiaries through the partners. Disability inclusion becomes most relevant when a change in behaviour in the target beneficiaries is aimed, as it is the changed expectations of their capabilities that can lead to their exclusion from the markets.



<sup>19</sup> Note that many of these interventions were started under Elan 1 and not continued in Elan 1.2

## 4.1 Intervention Mechanisms



Interventions aimed at improving the capacity of the target population may have one or multiple of these mechanisms included in the design of the intervention. It is important to look at these mechanisms as opposed to individual sector strategies, as it is these mechanisms that create the environment for the PWDs to benefit from the program's interventions. The high frequency of using these four mechanisms also highlights their importance for the sector strategies that the program has.

The following sections of the framework identify potential exclusion points for each of these mechanisms using the SIID tool to provide practical guidance on incorporating disability inclusion over a range of interventions.

### Information dissemination

Information in Elan's interventions is disseminated through three main mediums, including:

- Meetings with target beneficiaries/market
- Printed material for promotion and information
- Audio/visual ads or information through phones to inform the target market regarding the product













When designing information dissemination mediums, disability inclusion will mean facilitating PWDs to access the information, which may not necessarily mean total inclusion for all mediums used but the use of a combination of mediums to facilitate maximum inclusion.

Each of these require functions from the recipient to be able to access the information. For instance, someone with severe vision impairment may not be able to read the information provided in a brochure, however, if the same information is also being disseminated through corner meetings or radio messages, then the same person still has access to the information.

Being inclusive towards people with a wide range of abilities would require disseminating information through mixed mediums as opposed to limiting them to one medium and expecting a large-scale uptake. As discussed earlier, designing for inclusion not only benefits PWDs but also people with situational and temporary disabilities, hence expanding the recipients of the information.

The SIID tool guides Elan’s team to identify the functions required by the recipient to achieve the objective of an activity, the identification of the functions is the first step towards making an activity more inclusive. After the functions have been identified, the examples above illustrate the strategies to make the activity more inclusive. An important element of these strategies is that they are low cost or no cost tweaks, and have the potential to not only benefit PWDs but people who may be facing other difficulties. For instance, making venues accessible can not only benefit people who have mobility impairment but also people who may have limited time available to attend such meetings.

 <b>Audio/Visual Advertisements</b>	 <b>Meetings and Information Sessions</b>	 <b>Printed Information</b>
 <ul style="list-style-type: none"> <li>- Add closed captions and where possible translated captions to reach wider audience.</li> </ul>	 <ul style="list-style-type: none"> <li>- Make the venue closer to the recipients and easily accessible.</li> <li>- Vary the timings of the meetings to encourage a wider range of people to attend.</li> </ul>	 <ul style="list-style-type: none"> <li>- Use Sans-Serif fonts (Ariel, Tahoma etc) as they are preferred for vision or cognitive impairments.</li> <li>- Use font size 12 points or larger.</li> <li>- Use a 4.5:1 contrast ratio for normal text and 3:1 for large text (14 points or more).</li> <li>- Do not use colour alone to differentiate things, such as giving colour coding. Given descriptions where possible.<sup>16</sup></li> </ul>
 <ul style="list-style-type: none"> <li>- Add audio descriptions for the visuals. For example, “the seeds are being planted at a meter’s distance from each other”.</li> </ul>	 <ul style="list-style-type: none"> <li>- Encourage people with hearing or vision impairment to sit closer to the presenter.</li> <li>- Provide printed brochures on the key information shared in the meeting.</li> </ul>	
 <ul style="list-style-type: none"> <li>- Deliver information in small packets, that are easy to perceive and to be memorised.</li> </ul>	 <ul style="list-style-type: none"> <li>- Printed brochures on key information also helps recipients from forgetting the information provided.</li> </ul>	

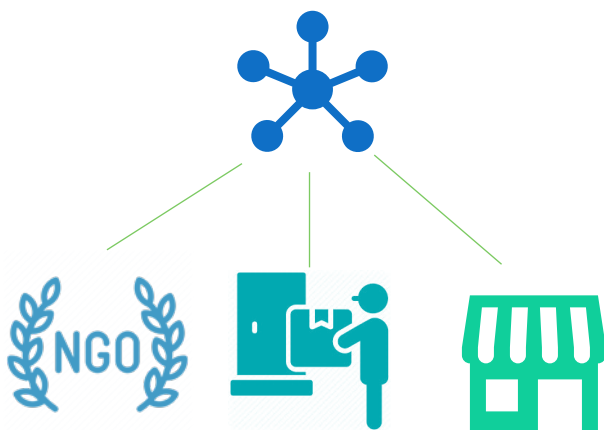
## Distribution

Multiple interventions across Agriculture, Renewable Energy and Access to Finance aim to improve the access of target beneficiaries to a variety of products through improved distribution.



Given the post conflict nature of some areas, and limited infrastructure in others, distribution and entry of new players into remote areas becomes critical for economic growth. Elan’s interventions use three main channels for distribution, including:

- Partnering with public departments or NGOs in areas with weak business presence.
  - Distributing through a network of agents
  - Distributing through retailers in urban and rural centres



The channel of distribution is based on the market analysis conducted by Elan team and the partners, however, in each of the models, the key exclusion can be caused by the inaccessibility of the product due to mobility challenges. While distributing through network of agents is often the most accessible mode of distribution, as the agents reach the customers as opposed to customers travelling to a point of sale, this may not be feasible or commercially viable for all

products. However, where possible and commercially viable (particularly in densely populated areas), incorporating direct delivery models into the design can both expand the market and improve access for PWDs.

In cases where distribution is done through retailers or channels where the customer has to travel to acquire the product, the accessibility of the locations becomes critical, as in, whether it requires a long walk from the bus stop to access the location or if the location requires customers to climb multiple stairs. Such cases, however, may also be beyond program’s control but partners can be encouraged to choose retailers which are more accessible to a larger number of people.

It is important to note here, that distribution is the activity of distributing the product and not about informing the market about the product, which has been covered in the previous section.

### **Product development<sup>20</sup>**

New Product Development is an important part of Elan’s interventions for Access of Finance, which is relevant for both Renewable Energy and Agriculture sectors.

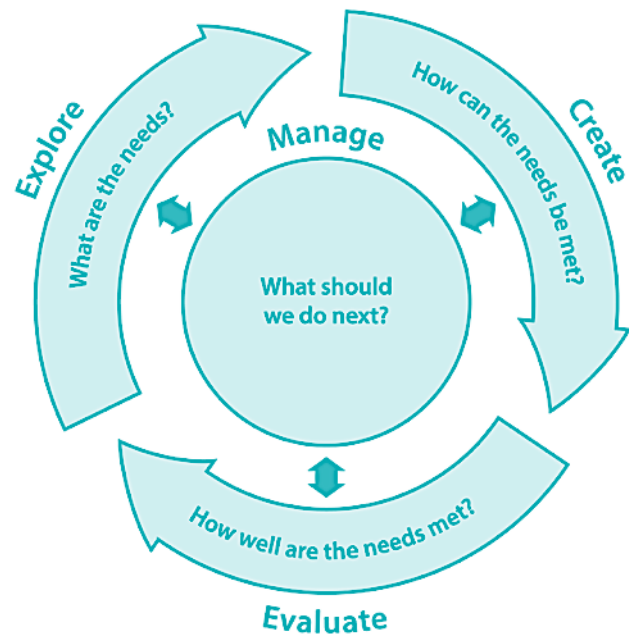
The process of developing inclusive products is based on the premise of acknowledging diversity in the market, which includes women, people of different ages, cultural variations and disability among others. In most cases, products are designed keeping in mind an

<sup>20</sup> Adapted from, “Inclusive Design Toolkit”, University of Cambridge, Department of Engineering

“average user”, as opposed to designing for diverse users which leads to excluding people who may not be the average user. On the other hand, designing while considering diversity, benefits a range of users including the average user and increases the relevance and marketability of the product.

The process of making the products involves four phases including:

1. Manage: Review the evidence to decide ‘What should we do next?’
2. Explore: Determine ‘What are the needs?’
3. Create: Generate ideas to address ‘How can the needs be met?’
4. Evaluate: Judge and test the design concepts to determine ‘How well are the needs met?’

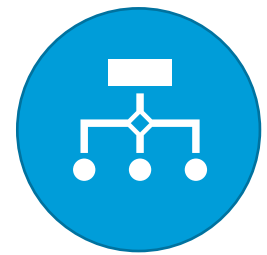


The process is iterative where all phases can be performed simultaneously to develop an inclusive product. The next page, incorporates this process with the SIID tool and the phases as identified in the program cycle section.

Explore	Create	Evaluate	Manage
<b>Tools to Use for Each Phase</b>			
Use the SIID Tool to understand the user’s journey and identify exclusion points based on functionalities. Based on the understanding, propose ideas and concepts to partners to expand the relevance of their products and present the business case to be more inclusive.		Use the results chain to mark activities that need to be assessed for potential exclusions. Identify PWDs and assess the usability of product in the monitoring exercises.	Assess inclusion during portfolio reviews to build the case and improve the tools based on evidence collected. Refine products and strategies based on findings and analysis.
<b>Guide for each phase of product development</b>			
<p><b>- It’s normal to be different.</b> Understand diversity amongst your customers.</p> <p>Understanding disability is only one part of understanding diversity.</p> <p><b>- Consider the whole user journey.</b> Satisfying user goals involves designing for end-to-end journeys that take place in real-world contexts.</p> <p><b>- Detail matters.</b> Dig deeper to uncover and address the things that people really do, really want, and really need.</p>	<p><b>Universal Design Principles</b></p> <p>As the user diversity and user journey is understood, apply the UD principles to respond to the SIID tools. The UD principles provide different aspects to be considered for design phase to make products more inclusive.</p>	<p><b>Test early and test often.</b> Perform quick tests with rough prototypes, early enough in the process that meaningful change is still possible.</p> <p><b>Prove it.</b> Complement opinions with evidence.</p>	<p><b>- Assess the business case.</b> Re-evaluate the business case, are the inclusive interventions faring any better than interventions that did not go through the inclusivity process?</p> <p><b>- Evolve and improve.</b> The framework developed needs to evolve as more evidence comes in, improve the framework and processes based on findings.</p>

## Aggregation

Elan's interventions on aggregation include facilitating the establishment of collection centres, facilitating contract farming models and improved transportation services. The aim of these is to provide new or improved avenues for the sale of produce to SHFs.



To develop disability inclusive models for aggregation, the process starts from understanding the additional or different functions expected from the target population to access these avenues of sale. For instance, if a farmer used to sell their produce in the local market without grading the produce whereas, the model introduced by the program expects the farmers to grade before selling the produce, then the farmer is expected to perform additional tasks to benefit from the model or would otherwise be excluded from benefitting from it.

To be inclusive, understanding the potential exclusions based on expectations from farmers to perform additional tasks is important, however, it is equally important to acknowledge and measure inclusion if the new model reduces any tasks previously performed by a farmer. For instance, if a farmer had to go to the market to sell the produce but with the new model can make sale at the farm gate or a closer location. As in such cases, the models by design are creating more inclusion for people who were previously expected to be more mobile and travel to markets.

Much like providing a combination of mediums to provide information to mitigate the risks of exclusion, in aggregation, an important aspect to consider is providing flexible trading arrangements to meet the needs of a range of suppliers with varying capabilities. This can include providing cash on delivery as well as direct deposit options, or accepting varying volumes of the produce given that they meet the quality requirement, or having a collection centre as well as providing collection services with an additional cost, making it viable for the business.

The more the flexibility of the trading arrangement, the wider the relevance of the new model to diverse suppliers. Increased flexibility often requires additional investment from the businesses and can be less commercially viable in cases where the supply is abundant and additional investments made by businesses may not yield the expected marginal returns. However, in cases, where the required quality and volume of supply is scarce, increased flexibility can provide more consistency to the supply required by the business.



## 4.2 Case study – Grains and Horticulture

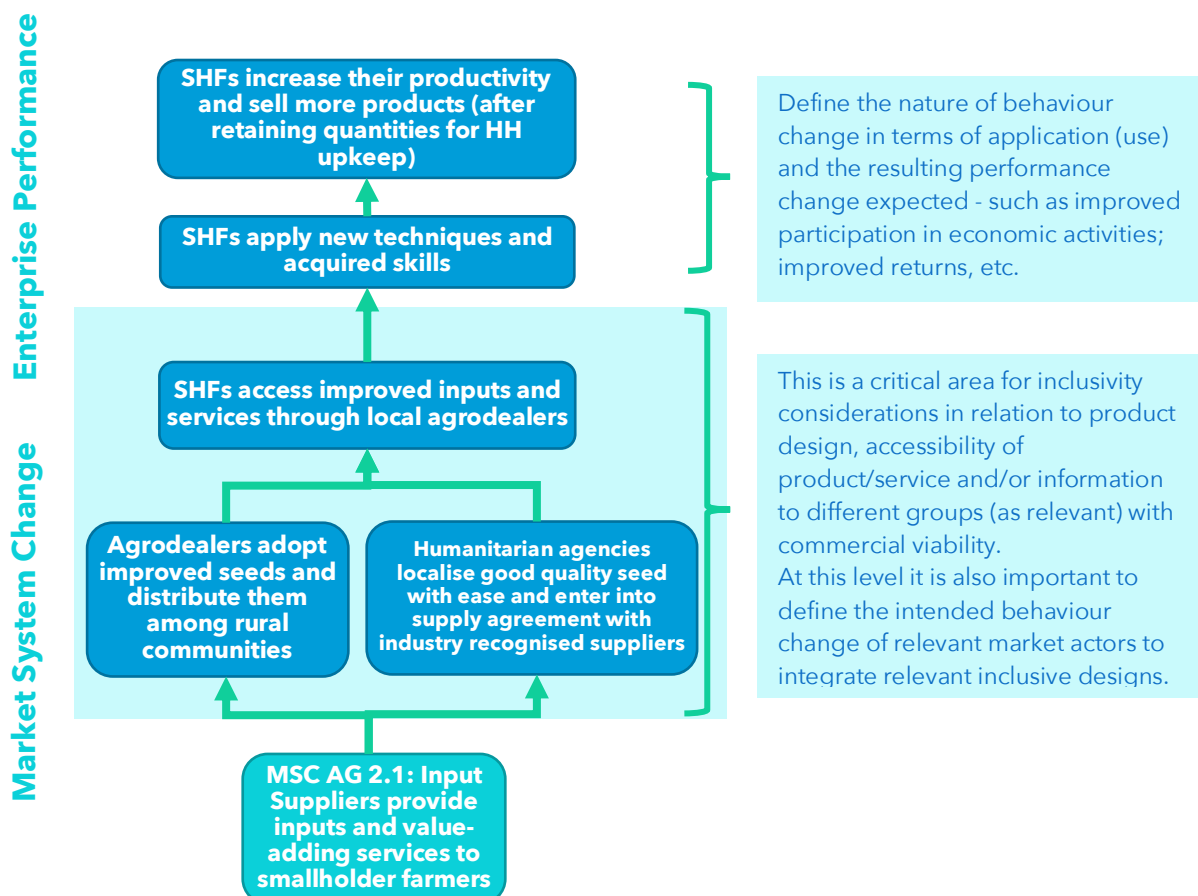
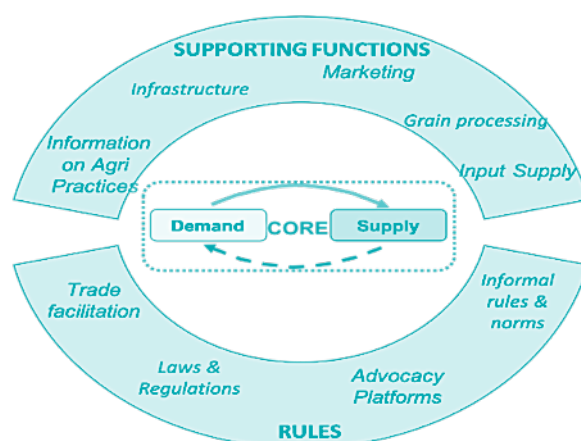
The Grains and Horticulture sector of Elan 1.2 is used as an example to demonstrate the application of the approach to inclusion.

The figure illustrates the key functions and rules, identified by the program, which are critical to change for growth in the sector.

For instance, input supply, particularly the development and distribution of good quality seeds is one of the market systems changes that Élan aims to achieve through its interventions. To bring together a vision for the sector, Élan develops a sector results chain outlining its sectors projected outcomes. At this stage, Élan identifies how each of its interventions interact with the potential beneficiaries and the intended inclusivity outcomes at different levels.

While the sector results chain illustrates the sequence of change intended and the broader relevance to inclusion, it is important to have the same analytical process for the selected functions, such as Input Supply in this case. It is essential to have an explicit description of intended changes and inclusivity outcomes expected at each level.

### Grains and Horticulture



### Identifying intended market systems

**change:** The market systems change will mean that input suppliers will provide inputs to smallholder farmers (SHFs), and SHFs will access improved inputs and services through the local agrodealers.

### Identifying points of interaction/relevance for inclusion:

The access to improved inputs and services through local agrodealers becomes the point of interaction between Elan’s interventions and the SHFs. It would be at this point where farmers with disabilities or other segments, of the market, can be excluded from benefitting from the interventions of Élan. This makes it the key point where the design of the interventions will need to be inclusive towards the relevant segments of the market, which in most cases does not include people with disabilities and women.



**Identifying appropriate environment for intended behaviour change:** The aim here will be to provide opportunities for the PWDs to participate in behavior changes at similar levels to the poor who may not have disabilities. When the opportunity is inclusive to access, PWDs become like any other beneficiary of the program. A person with a medical condition but the right environment to participate in the society is not disabled, and within the interventions, MSD programs can aim to achieve that inclusive environment for the disabled.

## 4.3 Key takeaways



**Market systems analysis and commercial viability** underpins the implementation of the disability inclusion framework.



Given the diverse and invisible nature of disability, the **approach to expanding inclusion is through low cost tweaks to commercially viable designs** to expand their outreach.



The SIID tool **does not offer solutions for disability inclusion but provides a way to think about it.** The intervention designs will continue to require innovative thinking and testing out new concepts.

**For more information please visit:**



[www.elanrdc.com](http://www.elanrdc.com)



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