Following the two unsuccessful rainy seasons in 2015, Ethiopia experienced one of the worst droughts in decades. The delayed onset of the summer (kiremt) rains in northern, central and eastern parts of the country was impacted by El Niño phenomenon. This resulted in reduced or delayed planting, poor germination and crop stunting, poor pasture regeneration and production and poor livestock productivity. The lack of rainfall and subsequent drought caused a massive increase in humanitarian needs.

In 2017 Ethiopia’s humanitarian needs were aggravated by the outbreak of conflict along the Somali-Oromia borders and another drought affecting large parts of eastern and southern Ethiopia. The annual Humanitarian and Disaster Resilience Plan (HDRP) launched in 2018, prepared jointly by the Government of Ethiopia with support of humanitarian partners, estimated that at least 7.8 million people would require immediate life-saving food assistance, 1.5 million individuals would require Shelter / Non-Food Items (S/NFI), and additional humanitarian needs have arisen due to conflict, with 857,000 Ethiopians displaced over the past year around the border areas of Oromia and Somali Regions.

IOM is tasked by the Ethiopian Humanitarian Country Team (EHCT) to regularly track, map and report on internal displacement. In response to this IOM launched its Displacement Tracking Matrix (DTM) mechanism. The DTM is an information management system developed to track and monitor the displacement and population mobility. It is designed to regularly capture, process, and disseminate various layers of information to provide a better understanding of the evolving needs of a displaced population, on site or en route. Adapted from the global methodology, relevant DTM components is carried out in targeted locations to facilitate displacement management, the delivery of immediate humanitarian services and emergency response, and informing transition and durable solutions. The differing levels of information collected contribute to the provision of a comprehensive profile of the IDP and returnee population in Ethiopia which is used by the government and humanitarian partners to protect, assist and advocate on behalf of these populations.

I. OBJECTIVE, SCOPE AND METHODOLOGY

The DTM program objective is to provide a common understanding of the displacement situation in and cross-border of Ethiopia. DTM is a set of methods and tools that permits the development of a common narrative to complex situations. It establishes a regular and dynamic system to monitor the vulnerabilities of beneficiaries and deliver a dependable routine communication line between those being assisted and those providing the assistance.

DTM is used across various stages of a humanitarian response – commonly during the emergency phase to inform planning and assistance and to inform preparedness activities or transition and recovery programming. Implementation may support a cluster or another stakeholder with targeted information needs, or may be intended to contribute to common services and coordination more broadly. In other cases, it may be designed to support host governments to apply tools and methods tested during previous crises.
**Populations of Concern:**

An **IDP** is any “persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border”.

A **returnee** is any person who was displaced internally or across an international border, but has since returned to his/her place of habitual residence.

IOM defines a **migrant** as any person who is moving or has moved across an international border or within a state away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is. For DTM programmatic purposes in Ethiopia, a migrant is considered any person present in Ethiopia who does not possess Ethiopian nationality. As such, DTM does not differentiate between migrant statuses, length of residence in the country, or migratory intentions. It counts as migrants those who may have come from refugee producing countries, along with long-term residents and labour migrants who engage in a circular migration pattern between Ethiopia and their countries of origin.

**II. DTM OPERATIONAL PRESENCE**
III. DTM COMPONENTS

a. Mobility Tracking (MT)

MT’s methodology is two-fold, firstly to identify and routinely assess at the municipality administrative geographical area (Zone) where IDPs and returnees reside and secondly to review this process at a lower administrative geographical location (Woreda). IOM implements two different assessment forms for each of these administrative levels referred to as the ‘B1f’ for Areas (Zone) and ‘B2f’ for Locations (Woreda). Each assessment is implemented separately from another with one capturing data at an aggregate level (B1f) and the other used to triangulate and verify the data at a finer and more granulated level (B2f). The results of the location assessments (B2f) are used to verify the information collected at the area level (B1f). The location assessments are carried out in all settlements identified as having IDP populations, returnee or migrants identified in the area assessments.

DTM Ethiopia’s MT methodology also includes site assessments that deliver greater granulation on IDP and returnee data. The site assessments are undertaken in identified IDP locations (camps, camp-like settings and host communities) to capture detailed information on the key services available. Site assessment forms are utilized to record the exact location and name of a site, accessibility constraints, size and type of the site, whether registrations is available, and if natural hazards put the site at risk. The form also captures details about the IDP population, including their place of origin, and demographic information on the number of households with a breakdown by age and sex, as well as information on IDPs with specific vulnerabilities. The form furthermore captures details on key access to services in different sectors: shelter and NFI, WASH, food, nutrition, health, education, livelihood, communication, and protection. The information is captured through interviews with representatives of the site and other key informants, including IDP representatives.

Baseline Area (B1f) Profiling and Baseline Location (B2f) Profiling (Bimonthly)

Baseline Area and Location Profiling is done to establish a baseline information of IDPs across the country. Information gathered includes estimation of existence and number of the displaced populations at Zone (Baseline Area) and Woreda (Baseline Location) level disaggregated by type of temporary settlements as well as approximate locations of identifiable displacement sites. The information is collected from local key informants and able to draw a rough picture of the IDPs distribution inside Ethiopia. Operationally, the information is used for IDP Site Assessment planning. Baseline Area Profiling targets all 75 Zones across 11 Regions in Ethiopia, while Baseline Location Profiling target all IDP-hosting Woredas that are identified through the Baseline Area Profiling. Updated list of 1st Priority Woredas formulated by the Early Warning and Response Directorate (EWRD) of Government of Ethiopia are included by default.

IDP Site Assessment - Protection Enhanced (Bimonthly)

In-depth IDP Site Assessment follow as soon as the information from the Baseline Location Profiling is available. Similarly, it collects the required data and information of the displaced populations from local key informants at site level. All displacement sites identified through Baseline Location Profiling are targeted for IDP Site Assessment. The DTM IDP Site Assessment component has integrated context-appropriate GBV indicators relating to site layout and infrastructure; security; women’s participation; and knowledge about and availability of GBV services in displacement sites. These indicators complement general DTM assessments which provide sex and age disaggregated data, population profiles and, information on general needs and service provision to provide a more holistic understanding of the
protection context in a given site. The data collected is analyzed and shared with GBV responders, as well as all the relevant service providers to improve operational responses.

*For the baseline assessments, data is collected via interviews with key informants such as representatives of the administration, community leaders, religious leaders, and humanitarian aid workers. To ensure data accuracy, assessments are conducted and cross checked with various key informant. The accuracy of the data also relies on the regularity of the assessments and field visits who are conducted every six weeks.*

**b. Flow Monitoring (monthly)**

Flow Monitoring (FM) is a component of IOM’s Displacement Tracking Matrix (DTM). The objective of FM is to track movement flows of migrant groups and individuals through key points of origin, transit locations and points of destination. The purpose of flow monitoring is to regularly provide updated information on migration flows and profiles of migrants through specific locations. Ethiopia’s FM component interacts with DTM’s core component known as Mobility Tracking (MT). Each component works towards better articulating Ethiopia’s human mobility dynamics and aims to refine the comparative advantage of each relative component.

IOM’s Flow Monitoring methodology to track migrants is two-fold, a baseline assessment and a profiling survey. Both tools strive to provide a comprehensive understanding of migrant routes, locations and numbers, as well as information on types of residence, demographics, vulnerabilities, push and pull factors for migration, country of origin, challenges confronted and length of migration.

*Flow Monitoring Points*: locations that are known to be frequently transited by migrants, which are usually places such as border posts (land, sea and air), bus stations or transit centres, where data is collected. These places are usually identified in close coordination with stakeholders.

*Flow Monitoring Registry*: collection of quantitative data through various sources at flow monitoring points.

*Flow Monitoring Surveys*: surveys that are conducted at the Flow Monitoring Points on a population sample to gain a deeper understanding of migration trends as well as more information on the profile of the population transiting through the FMPs. Two versions of the survey are available: FMS1 and FMS2. Both surveys aim to capture additional information on migrants’ profiles and needs through individual interviews. FMS 1 is a shorter version of FMS 2 which is implemented in contexts where detailed information on individuals' profiles, needs and expectations is needed and when enough time can be allocated for comprehensive individuals interviews.

**c. Biometric Registration (B.R.A.V.e)**

Registration is a systematic method of collecting and recording data to ensure that an individual or family may be identified. It includes information about individuals or families, such as their names, dates of birth or gender. The information collected serves to direct the humanitarian community towards delivering services, supporting follow-up with an individual and/or facilitating a protection intervention. Registration assists in identifying groups at risk and their specific needs. Specific protection programmes such as tracing, legal representation and family reunification can only be adequately implemented if reliable and up-to-date data are available. A secondary use of registration data is for profiling ~ where collected registration information is aggregated to understand the characteristics of the registered population. The
purpose of registration – and specifically how the information is to be used – determines the information fields that need to be collected in any registration exercise. Once registration is conducted, it needs to be a continuous process that records and updates essential information as it changes over time, such as births, deaths, marriage, divorce, new arrivals and departures.

The objective of the biometric registration is to provide detailed information to partners in order to facilitate beneficiaries’ targeting and support the implementation of humanitarian activities such as distribution, cash transfer, relocation, etc. The selection of areas where biometric registration is conducted is based on the DTM’s Mobility Tracking assessments which allows for the identification of vulnerable areas or on partners’ referrals.

IOM’s Biometric Registration and Verification (B.R.A.V.e) technology fingerprints all household members as well as photographing young children and babies whose fingerprints are not recordable. Biometric registration reduces duplication and shortcomings commonly found in prior registration processes and provides baseline information that humanitarian actors can use for response planning. All the data is stored on a central server and mobile server laptops are deployed to the Field as intermediate servers for data collection and consolidated using a separate module when they reach the data centre.

The main data collected are:

- **Individual data:** First Name, Middle Name, Last Name, Age, Sex, Relationship with Head of Household (HoH)
- **Displacement Data:** Place of displacement (Region, Zone, Woreda and site), reason for displacement, Date of displacement
- **Intension data:** Intension to stay (Yes or No), reason for leaving and where to (type of the place and specific location - Region, Zone, Woreda)
- **Vulnerability data:** Type of vulnerability in the household

Biometric registration is conducted in camps and host communities and target IDPs, returnees and host communities. The registration exercise consists in establishing the profile of IDPs by collecting detailed information at household and individual levels. The data is captured through an individual interview with the head of household and include information on individual household members, displacement history, education, livelihood, needs and vulnerability.

The biometric registration is usually implemented in three steps. The first step consist in identifying beneficiaries. This is usually done by IOM staff who go to the selected locations early morning and distribute tokens to the people to be registered after asking a few questions to confirm their identity and whether they are eligible for registration. The second step consist in collecting data from each of the individuals who have been identified and capturing their fingerprints and pictures. During the last stage, all registered head of households are given a card with their name and a code bar that can be later used to verify their identities. The data collected through the registration process are available for all partners and can be shared as per IOM data protection principles.

d. **Emergency Tracking Tool (ETT) (weekly)**

The Emergency Tracking Tool (ETT) aims at complementing the baseline assessments by providing regular updates on sudden population’ movements. This tool acts as an alert mechanism to inform partners and ensure that assistance is delivered in a timely manner. The information collected include: IDPs locations,
reasons of the movements as well as basic humanitarian needs. ETT reports are published on a weekly basis. The data will be collected by IOM staff deployed on the field or through phone interviews with key informants.

e. IDP/returnee profiling

The main objective of the IDP profiling is to better understand the profiles of IDPs and returnees, their movements, needs and intentions in order to inform the humanitarian response and help partners finding durable solutions for the population affected by the insurgency. Humanitarian partners are closely involved in all stages of the process from the data collection to the analysis of the results. The profiling exercise consist in interviewing IDPs and returnees who are registered during the biometric registration and ask detailed questions about various subjects such as the interviewee's intentions, movements, needs or assistance received.

IV. DATA COLLECTION NETWORK

Building on the achievements of 2017, IOM will continue to build the capacity of its partners towards implementing the 2018 methodology. IOM will continue to work with its comprehensive list of over 4,000 Key Informants. DTM will continue to work with its Key Informants from local Agricultural bureau, Rural development bureau, Food security bureau, Education bureau, Gender issues bureau, Health bureau, Kebele youth association, Kebele women’s association, Disaster Prevention and Preparedness Office, Kebele leader, Woreda leader, Zone official representatives, humanitarian and social organizations, community and tribal representatives, and representatives of displaced, returnee and migrant groups. It will further employ mixed data collection methods and approaches to ensure accurate contextualization of displacement and mobility dynamics within the country. Some of the methods employed are as follows:

- **Secondary data review**
  Desk review will be done using the Information Management and Working Group (IMWG) as a platform for DTM to share and triangulate existing data, reports, and assessment on Ethiopia and using the results to develop implementation plans and to streamline reporting mechanisms to EHCT.

- **Key Informant Interview**
  Key informant interview will be the primary method of data collection and will be done through direct interview with the Agricultural bureau, Rural development bureau, Food security bureau, Education bureau, Gender issues bureau, Health bureau, Kebele youth association, Kebele women’s association, Disaster Prevention and Preparedness Office, Kebele leader, Woreda leader, Zone official representatives, humanitarian and social organizations, community and tribal representatives, and representatives of displaced, returnee and migrant groups. Key Informant interviews will be done either at target location or remote location as determined by the accessibility and safety, and security situation for each particular location. When direct interview will not be possible, remote interview will be done.

- **Direct Observation**
  Direct observation will be done when researchers have access to the Key Informant interviews directly at the site. It will be done using the predefined checklist which will be included as part of the form questionnaires.

- **Focus Group Discussion**
A discussion guide will be used to hold a focus group of different key informants as necessary. DTM Ethiopia will implement its Gender Sensitive Guidelines when carrying out Focus Group discussions (See DTM Ethiopia Gender Sensitive Focus Group Guidelines - Mobility Tracking DTM Ethiopia).

- **Measurement & Calculation**
  DTM uses a demographic calculator developed in coordination with UNICEF to align DTM Sex Age Disaggregated Data (SADD) with that of UNICEF’s. The demographic calculator samples a minimum of 20 households per site to deliver DTM with a demographic sampling size of each sites. The number of households assessed varied depending on the size of the site.

V. **COORDINATION MECHANISMS**
DTM is orientated at developing sustainability and resilience by building Ethiopia’s institutional capacity at all levels. Working with the Ethiopian Government is important to DTM Ethiopia’s effort. Specifically, DTM Ethiopia works with the National Disaster Risk Management Commission (NDRMC) at Federal level and with the NDRMC’s regional counterparts. DTM uses Ethiopia’s Central Statistical Agency’s (CSA) shapefiles (2008) for the development of all its maps.

<table>
<thead>
<tr>
<th>National</th>
<th>Regional Government Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>National Disaster Risk Management Commission (NDRMC)</td>
</tr>
<tr>
<td>Afar</td>
<td>Disaster Prevention and Food Security Programme coordination Office (DPFSPCO)</td>
</tr>
<tr>
<td>Amhara</td>
<td>Disaster Prevention and Food Security Programme coordination Office (DPFSPCO)</td>
</tr>
<tr>
<td>Gambella</td>
<td>Disaster Prevention and Food Security Agency (DPFSA)</td>
</tr>
<tr>
<td>Oromia</td>
<td>Disaster Risk Management Commission (DRMC)</td>
</tr>
<tr>
<td>Somali</td>
<td>Disaster Prevention and Preparedness Bureau (DPPB)</td>
</tr>
<tr>
<td>Tigray</td>
<td>Bureau of Agriculture and Rural Development Core Process, Early Warning Response and Food Security</td>
</tr>
</tbody>
</table>

DTM seeks to work with the Government of Ethiopia at all levels to ensure that the data being collected and shared amongst humanitarian partners in of the highest quality. DTM works with the Government in ensuring that DTM core products, reports and datasets are appropriately revised and endorsed prior to publication. DTM reports are both verified at national level by the Federal NDRMC office and at regional level by the respective offices. DTM commitment to developing partnerships with the Ethiopian Government aims to enrich DTM efforts and encourage relevant ministries to use DTM for their own policy and planning processes.

The data analysed and shared in DTM reports is collected from an array of Key Informants which vary from local Government officials, humanitarian actors, community leaders, health and education workers, religious leaders and tribal leaders (see Data Collection Network section for more information). DTM, through its field staff and partners works with all the KIs to coordinate the most up to date and correct data possible during a given period.

Coordination with inter-agency partners especially related to assessments conducted by DTM allows for broader consensus on the credibility and relevance of the data, and encourages partners to incorporate the results of DTM data into their operational planning. IOM is committed to enabling a more effective exchange of information regarding assessments, making them more relevant to the international community as a whole and ensuring complementarity, rather than duplication of efforts among agencies.
VI. INFORMATION PRODUCTS

Data processing and analysis will be undertaken by IOM Ethiopia with the support of IOM HQ. Where required, thematic experts from various sectors will be invited to share their inputs. Technical staff specialized on statistics, data visualization, and GIS mapping will be deployed as needed. When appropriate, draft analysis will also be shared with relevant stakeholders for feedback and consultation before finalization/circulation.

The following reports are expected to be generated and published on a regular basis.

- **Executive Summary**
  DTM’s Executive Summaries present a general picture of each of DTM’s monthly or bimonthly findings. It provides a snapshot into the array of DTM’s products providing a synopsis of key points and findings from the reporting period.

- **DTM Analytical Report**
  DTM Analytical Reports present a comprehensive analysis into all the DTM data collected over a specified reporting period. The Analytical reports provide details on all indicators related to DTM’s vulnerable populations. They are the main information products that will comprehensively present the overall and multi-sectoral country-wide situation analysis based on data gathered through this process.

- **Country-wide GeoDataset**
  DTM’s Geodatabase provides MT cleaned datasets on all indicators collected from across the country during the reporting period. The Country-wide GeoDataset is one of DTM’s main products providing all partners with large and in-depth datasets for greater analysis and detailed information for targeted and evidence-based interventions.
Interactive Dashboards
DTM’s Interactive Dashboards visualize DTM’s datasets through live and interactive dashboards that facilitate the communication and digestions of DTM large datasets.

Thematic profiles
Thematic profiles are targeted products that provide detailed analysis into selected themes that are of relevance during a reporting period.

Story maps
Story maps articulate DTM’s data across interactive maps presenting key findings and a more dynamic interpretation of the information.

Static maps
DTM’s Static Maps are presented across all of IOM Ethiopia’s products delivering all partners clear maps based on GPS coordinates developed based on the Central Statistical Agency’s shapefiles.

VII. QUALITY CONTROL

DTM Area and Location assessments employs a number of indicators to measure the credibility of collected data from various key informants (KIs) in order to rate the extent to which the information can be trusted. These indicators measure the similarity of the data provided, its correspondence to expectations based on general available information and knowledge, as well as methods of managing and documenting the data within the same area. These factors together with the number of KIs involved, and whether field visits and direct observation were used as a method of verification, are used to rate the credibility of the data in each of the assessed areas. A colour coding credibility method is used to rate the level of trust towards the data provided by DTM KIs in each area, with green indicating highest credibility rating, followed by yellow for mostly credible data, orange for somehow credible information, and red for low credibility data. With this method in place, DTM aims to enhance and expand its field network, and enable continuous improvement of data credibility.

Manual Check and Verification
Each completed form and questionnaire have to be manually checked, verified, and cleared by each corresponding team leader before it is sent for data entry. Where mistakes are identified or further information is required, the corresponding enumerator will verify the data through any available methods (e.g. revisit the site or contact the key informant).

Automatic Validation
Data entry interface is designed with comprehensive automatic data validation to minimize errors during data entry processes.

Random Quality Control
Once all the data is entered into the ODK database and further consolidated before importing to the main central database, the database administrator will use some random samples of the data to check the quality and as necessary propagates request of clarification to field team.

Extended Verification
Another stage of verification will done during the data processing and analysis stage as draft analysis materials will be used to check for any possible inconsistency and highly unusual result. Verification
will be done against hardcopy forms and when necessary to be re-verified through the corresponding enumerators in the field.

VIII. PROTECTION MAINSTREAMING

In order to enhance the quality of the data collected through the DTM assessments and provide a better picture of the protection concerns and risks present in displacement settings, protection indicators have been incorporated into DTM exercises (site level assessments and biometric registration). The purpose is to gather data on: major risks and needs faced by women, girls, men and boys, especially most vulnerable groups, related to GBV, human trafficking, or child protection.

The data on protection that are considered to be non-sensitive are shared with all humanitarian partners while sensitive and personal data are shared through special protocols following IOM data protection principles.

IX. DATA PROTECTION

The implementation of DTM activities follow IOM data protection principles. An evaluation is conducted prior to the start of any DTM initiative to assess the risk associated with the collection of personal information and to ensure that the implementation of activities do not cause harm to IDPs, returnees or migrants. DTM enumerators are trained on data protection principles to make sure that the information collected on the field is handled adequately and kept confidential. The sharing of DTM data is done according to pre-established protocols and in coordination with the IOM Legal Department. Only non-personal data can be shared with partners and made publicly available. Stakeholders who wish to provide direct assistance to individuals and who have the means to ensure that confidential data is kept safe are permitted access to DTM’s data based on data sharing agreements. Individual data may only be shared after the explicit consent of the concerned individuals.

---

i CCCM CAMP managers toolkit
ii CCCM CAMP managers toolkit