

OPTIONS FOR PiN ESTIMATION BY HUMANITARIAN CONSEQUENCE

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Introduction

This note is intended to provide *optional* guidance on calculating People in Need (PiN) for the 2020 HNO¹. While contributions to this note come from multiple agencies, organizations and clusters, the guidance within is not formally endorsed and is intended only to support the PiN calculation element of the HNO process during a transitional year for the Humanitarian Programme Cycle. Decisions for PiN calculation should be made at the country level, and optional guidance on the methods provided here should not preclude those decisions already taken. The only requirement is that PiN figures that quantify humanitarian consequences of the crisis must be the result.

The role of calculating PiN within the 2020 HNO Process

The calculation of PiN is not a standalone process in the development of the HNO. It is sequenced within (and near the end of) a series of key analysis steps:

1. Build an analysis team with the required expertise in both the *data and the context*.
2. Define the scope of the analysis, and identify the *data and evidence* required to support it.
3. Structure the analysis to seek consensus in:
4. Understanding the context / setting for the crisis
5. Defining and quantifying the impact of the crisis
6. Establishing the affected population groups / areas
7. Identifying the main humanitarian consequences of the identified impacts on the population groups / areas
8. Determining the causes and relationships of the consequences
9. Estimating severity of the consequences
- 10. Derive PiN based on agreed humanitarian consequences and their severity**
11. Project evolution of consequences

There are many ways to do it, depending on the crisis context, data availability, and capacity for analysis. In all cases though, data analysis and expert Knowledge must support each other in generating the key figures in the HNO at each stage.

PiN by Humanitarian Consequences - Standards and Rationale

Minimum Standards

2020 will be a transitional year for the HNO and HRP processes. The number of People in Need (PiN) is required for at a minimum:

- The humanitarian consequences of 'Physical and Mental Well-being' and 'Living Standards'.
- For the 'Protection Consequences' a Sectoral PiN will be furnished where the Protection Cluster has implemented their global guidance (Please refer to Section V).

¹ Comprehensive guidance that provides agreed inter-agency standards and methods for PiN generation and severity analysis will be developed for the 2021 HRP cycle and will replace this document.

For Resilience Consequences, if data is available and with the involvement of development actors' estimates may be developed (however these figures should not be added to the total PiN).

Refugee PiN: The total number of refugees in need in response plans will be defined by UNHCR with partners based on current refugee population figures as well as any expected population increases and decreases in planning projections.

Rationale

The main purpose of centering the analysis of needs on distinct types of humanitarian consequences and severity is to better inform prioritization at the HRP stage - by establishing the time criticality associated with physical and mental well-being (at its most severe, people facing death or irreversible harm) and other conditions that will also have to be addressed and warranting an additional layer of prioritization such as living standards (basic needs that need to be met in order to not lead rapidly to life-threatening consequences).

It is understood that the vast majority of people facing physical and mental well-being problems will also face living standards problems and resilience related problems². However, the prioritization process will attribute greater criticality³ to populations where the severity of physical and mental well-being problems exceeds emergency thresholds than those facing emergency conditions related to living standards⁴. Nonetheless, the analysis of the combination of both humanitarian consequences will remain essential because once a population group/sub-group is prioritized, the response will have to take into consideration the type of living standards problems they also face, as there will be responses that address both at the same time.

To support joint response analysis in this way, the estimation of the number of people in need of humanitarian assistance must maintain a clear distinction between groups facing emergency levels of physical and mental well-being consequences and those facing emergency levels of living standards consequences.

PiN Calculation Guidance

I. Selecting data for estimating PiN

PiN is a sum of the number of Persons in Need, by humanitarian consequence in each population group and geographical area based on the analysis of data / information.

The first step in calculating PiN is to select 'indicators' of need for each of the humanitarian consequences. A good starting point is to consult the 'Indicator Reference Table' produced by the JIAG, which contains a set of 'core indicators' adapted for use in intersectoral needs / severity analysis. An example is shown below in figure 1.

² A few exceptions can be imagined, such as a wealthy population group that is specifically attacked because of their status and/or assets, but not likely occurring at a magnitude to refute this assumption in the HNO.

³ 'Criticality' is different than severity and refers to the temporal urgency of the problem. Establishing criticality supports planning for response in terms of sequencing, not 'importance'.

⁴ In the hypothetical situation of absence of people experiencing physical and mental wellbeing problems, the prioritization process would attribute greater criticality to populations where the severity of living standards problems exceeds emergency thresholds, than those facing severe conditions related to resilience.

Access to a functional and improved sanitation facility				
1	2	3	4	5
None/Minimal	Stress	Severe	Extreme	Catastrophic
Access to improved sanitation facilities, not shared with other households	Access to improved sanitation facilities, shared with less than 20 people	Access to improved sanitation facilities, shared with more than 20 people	Access to unimproved facilities OR access to improved facilities shared with more than 50 people	Disposal of human faeces in open spaces or with solid waste
Total Population				
Total Affected				
Total PiN				

figure 1

Some points to consider when selecting indicators for PiN calculation:

- **Appropriateness:** Select the indicator(s) most suitable as a proxy, that is provide a strong indication of humanitarian needs. It is better to choose a smaller number of suitable indicators which prior experience and expert consensus agree track closely the situation and thus act as a suitable proxy. This also increases the likelihood of being able to find indicators with good availability of data (or expert knowledge).
- **Non-correlation.** Choosing indicators which are known to correlate closely with each other effectively leads to redundancy, adding no value. Identify independent indicators which are not known to be closely associated with any other indicator being included in the analysis. If two themes are closely related, such as consequences related to WASH and Health, this may require checking with colleagues to ensure all indicators are reasonably independent of the others.
- **Data availability.** Indicators with even, recent coverage the appropriate geographic level should be preferred. If there is a lack of available data across all areas, the discussion needs to focus on using a different indicator for which better data is available, or creating an “estimation indicator” based on expert opinion or qualitative evidence – with non-quantitatively-defined categories, or in the worst case a simple Yes/No.

For example:

- If the context is data-rich, clusters may choose to identify quantitative indicators (i.e.: Number of schools used to shelter IDPs)
- If the context is data-challenging, clusters can use ranges (i.e.: Between 1-25% of schools are used to shelter IDPs=1; Between 26-50% of schools are used to shelter IDPs=2)
- If the context is data-poor, clusters can use incrementing graduation (i.e.: No schools are used to shelter IDPs= 0, Some schools are used to shelter IDPs=1, Most schools are used to shelter IDPs=2)
- **Unit(s) of analysis.** Indicators will originate from different authoritative sources (sector or multi sector assessments, expert judgement) and will be often collected using different units of analysis:
 - Individual level: GAM, BMI, disability, etc.
 - Household level: Minimum Expenditure Basket, access to improved water sources, etc.
 - Geographical area/group level: % of displaced persons, price evolution, % of damaged shelters, etc.

Regardless of the unit of analysis (individual, household, etc.), all results must be aggregated at the level (geographical area and/or affected group level) at which there is enough representative data to ensure confidence in the findings.

- **Demographic coverage.** if the selected indicators apply only to a subset of the population (e.g. children under five for the SAM Prevalence, or women for Maternal Mortality Rates), consensus must be reached on if the measure can be used as a proxy for the entire population group's needs or only a subset.
- **The use of Composite Indicators.** The use of composite indicators should be approached with caution. The points of consideration for selecting indicators listed above are even more so critical in considering to aggregate multiple indicators for a single measure. For the 2020 HNO it is recommended to only use those composites that have well-established relationships to humanitarian needs in your crisis context, or globally. Some examples of globally well-established Composite measures:
 - *Integrated Phase Classification (IPC)* -The food security community uses IPC to determine the PiN for this sector. In countries where an IPC exercise has taken place it is strongly recommended that the PiN contribution from the Food Security Sector should be those populations estimated under phases 3 - 5 and categorized under Physical and Mental Wellbeing.
 - Under 5 Mortality
 - GAM
 - HeRAMS

Disaggregation within groups is important to identify specific vulnerability factors such as those associated with gender, age, disability, other socio-economic characteristics, and specific locations within the geographic areas of focus (e.g. a specific sub-area exposed to particular threats or hazards).

In many contexts, assessment results may not be statistically representative at the level of multiple population groups within a specific geographic area. Many assessments will allow this only to IDP/non displaced at best. This doesn't mean that we cannot use the data to inform the severity analysis/PiN calculation below this level, it just means that the process must be documented well enough to show where the numbers stop being representative and where the expert opinion begins to have equal influence. Or, as part of the HNO step of "defining the scope of analysis", the ICCG/AWG sets the limits of the geographic / demographic disaggregation for the severity analysis to match the limitations of the data.

On PiN Calculations in Data ‘Rich’ Contexts:

The PiN by humanitarian consequence should be based on a selection of indicators for each consequence. Available data may come in two ways, depending on how it was collected⁵:

1. The assessment was conducted in a way that allows to categorize the assessed population directly within a severity scale: In the example below, needs assessment questions were developed in a way that the answers can be placed in a 1-5 severity scale.⁶

If the assessment is statistically representative for the units of analysis of the HNO, we can estimate the percentage of people by area who would be placed under each of the severity scales. See below an example for the whole IDP population living in a fictitious location “a”. As you can see, all the IDPs living in location “a” (25,000) were placed under one of the severity scales.

Following the logic shown above in figure 1, the people categorized in the scale 3, 4 and 5 for that indicator will be considered in need, in this case 3,250 (or 13% of the IDPs living in location “a”) as seen in figure 2 below.

Example for IDP population. Total IDP population in location “a”: 25,000

Access to a functional and improved sanitation facility							
		1	2	3	4	5	
		None/Minimal	Stress	Severe	Extreme	Catastrophic	
Access to improved sanitation facilities, not shared with other households			Access to improved sanitation facilities, shared with less than 20 people	Access to improved sanitation facilities, shared with more than 20 people	Access to unimproved facilities OR access to improved facilities shared with more than 50 people	Disposal of human faeces in open spaces or with solid waste	
Location a		13,250	8,500	1,750	1,000	500	25,000
		53%	34%	7%	4%	2%	100%
Total Population							
Total Affected							
Total PiN							

Figure 2

2. Available data does not allow a direct application of a severity scale (e.g. yes/no questions). Staying with the above cited example, access to sanitation facilities might be measured through the following question: “Do you have access to a latrine?” In which case the collected data would present itself along the following lines, as seen in figure 3:

The suitability and adaptability of indicators that feature a smaller or larger than 5-point severity scales would have to be treated individually, with consensus reached on how the scale(s) relate to the others. If the ‘answers’ to a binary yes/no question can be found in the draft JIAF indicator

⁵ When there is no information available, the expert judgement should come in to fill the information gaps that exist. See following pages.

⁶ This is the way severity is integrated in the estimation of the PiN. Please, do not confuse with the severity by geographical location derived from the use of the Needs Comparison Tool (NCT). The severity by geographical location which will be used to produce the inter-sector severity maps by humanitarian consequence, based on the same indicators used for the PiN is not the object of this guidance.

reference table, the scores for those answers could be used (i.e. if in the access to latrines example, absolutely no access to latrines would have to be established consensually on the severity scale of 1 to 5).

	Baseline IDP population	Access to latrines	
		YES	NO
Location "a"	25,000	87%	13%
		21,750	3,250

↓

Total IDPs in need for this indicator in location "a": 1,750 + 1,000 + 500 = 3,250 (or 13%)

Figure 3

On PiN Calculations in Data 'Poor' Contexts:

Typically, in a humanitarian context the information environment is made up of a patchwork of assessment data and reports – rarely achieving 100% coverage required for the scope of analysis of the HNO. Data analysis and expert knowledge must support each other in generating the key figures in the HNO, at each stage. Best practices for structured methods to harness expert judgement (such as the IPC protocols for converging evidence) are currently under review and will lead to a detailed set of protocols which will be shared on completion, but the main points are outlined [here](#). In addition, it may be possible to build upon the Needs Comparison Tool (NCT) work done for previous HNOs.

II. Estimation of the PiN for the Physical and Mental well-being consequence

Definition of Physical and Mental Well-being

Physical and Mental Wellbeing Consequences have a direct effect on people's mental and physical integrity and/or dignity in the short term (within the next six months), recognizing they also have longer term effects. These include but are not limited to:

- *Death and injuries*
- *Morbidity (infectious and chronic diseases)*
- *Malnutrition (acute and chronic)*
- *health outcomes related to Severe Food Insecurity (IPC phases 3-5)*
- *Physical and mental disability, impairing people's ability to move, communicate, learn etc.,*
- *Human rights violations such as arbitrary detention, targeted violence, killing.*

While life physical and mental wellbeing consequences are, by definition severe, the urgency of the response can differ based on the timeframe of their effect (short term versus longer term survival) and their degree of irreversibility in the absence of response.

Once we have the percentage of people in need by indicator for the different population groups and locations, all the selected indicators are put together as shown below in order to estimate the PiN for “wellbeing”:

Baseline population of IDPs by location

Indicators selected to estimate the PiN of wellbeing consequence

	Baseline IDP population	HUMANITARIAN CONSEQUENCE "Wellbeing"			
		Indicator 1	Indicator 2	Indicator 3	Indicator 4
Location a	25,000	13%	19%	7%	22%
Location b	84,000	11%	32%	20%	16%
Location c	23,500	13%	9%	5%	12%
Location d	38,450	14%	26%	15%	18%

Percentage of IDPs in need by indicator

Figure 4. This fictitious example is referring to the IDP group, but this should be done in different tables for each population group analyzed (IDPs, returnees, hosts, etc.)

As stated above the percentages of people in need by indicator represent those categorized in severity 3, 4 or 5 (if the data allows for a direct application of a severity scale).

Now, to estimate the IDPs in need for the “wellbeing” consequence by location, first it must be determined whether the indicators refer only to a specific sub-group. If inclusive, the highest percentage of PiN among all the selected indicators is then applied to the baseline population of IDPs for that location.

This exercise should be repeated for the different population groups analyzed and then the total PiN for the “wellbeing” consequence will be the PiN of all the population groups added up.⁷

IDPs in need for “wellbeing” consequence by location

	Baseline IDP population	HUMANITARIAN CONSEQUENCE "Wellbeing"				PiN - Wellbeing Consequence
		Indicator 1	Indicator 2	Indicator 3	Indicator 4	
Location a	25,000	13%	19%	7%	22%	5,500
Location b	84,000	11%	32%	20%	16%	26,880
Location c	23,500	13%	9%	5%	12%	3,055
Location d	38,450	14%	26%	15%	18%	9,997
						45,432

The estimated PiN by location for “wellbeing” consequence is the highest percentage among all the indicators chosen applied to the baseline population of the IDPs in that location.

IDPs in need for “wellbeing” consequence in all country

Figure 5

The same steps would be done for data that only allows for yes/no distinctions (access to a service or a particular condition, etc.). Important to clearly indicate this in your dataset and, where appropriate, in the HNO.

⁷ Provided the groups to be analyzed are mutually exclusive (e.g. IDPs, returnees and host populations). Be also aware that some of the proposed indicators may apply only to a particular group of people (e.g. % of children under-5 malnutrition, school enrollment rate). In this case the percentage cannot be applied to the entire baseline population, but only to those concerned (e.g. for "prevalence of U5 SAM", the concerned population would only be children from 0 to 5 years).

III. Estimation of the PiN for the “living standards” consequence

Living standards are those humanitarian consequences that have a direct effect on people’s ability to pursue their normal productive and social activities and meet their basic needs in an autonomous manner. They manifest in different types of deficit and the use of various coping mechanisms to meet basic needs such as the lack of:

- Food
- Income
- Productive assets (e.g. land, animals, tools, shop, etc.)
- Access to basic services such as health care, water, sanitation, shelter, education
- Access to formal and informal social assistance
- Access to legal documentation
- Access to markets etc.

For example, to estimate the IDPs in need for the “living standards” consequence by location, the highest percentage of PiN among all the selected indicators in this category is applied to the baseline population of IDPs for that location as long as the indicator is inclusive of all population subgroups (men, women, children of all age groups); otherwise an aggregation might be needed. As stated at the outset of this guidance it is assumed that those classified as people in need under the “wellbeing” consequence, by default, also have “living standard” problems.

The estimated PiN for “living standard” consequence is the highest percentage among all the selected indicators applied to the baseline population of the IDPs in that location.

	Baseline IDP population	PiN - Wellbeing Consequence	HUMANITARIAN CONSEQUENCE "Living standards"				PiN - "Living standards" Consequence
			Indicator 1	Indicator 2	Indicator 3	Indicator 4	
Location a	25,000	5,500	27%	19%	23%	32%	8,000
Location b	84,000	26,880	17%	45%	35%	27%	37,800
Location c	23,500	3,055	19%	24%	11%	18%	5,640
Location d	38,450	9,997	18%	27%	29%	25%	11,150
	170,950	45,432					62,590

figure 6

For programming purposes, it is recommended to also quantify the subset of people in need under the “living standards” consequence, but who are not having “well-being” related problems at the same time as illustrated below. This exercise should be repeated for the different population groups and locations analyzed.

The estimated PiN for “living standard” not suffering “wellbeing” problems is the “living standard” PiN minus the “wellbeing” PiN

	Baseline IDP population	PiN - Wellbeing Consequence	HUMANITARIAN CONSEQUENCE "Living standards"				PiN - "Living standards" Consequence	PiN - "LS" Consequence only
			Indicator 1	Indicator 2	Indicator 3	Indicator 4		
Location a	25,000	5,500	27%	19%	23%	32%	8,000	2,500
Location b	84,000	26,880	17%	45%	35%	27%	37,800	10,920
Location c	23,500	3,055	19%	24%	11%	18%	5,640	2,585
Location d	38,450	9,997	18%	27%	29%	25%	11,150	1,154
	170,950	45,432					62,590	17,159

figure 7

IV. Estimation of the PiN for the “resilience/recovery” consequence

If there is interest and capacity to explore, the same steps are suggested for estimating the PiN for resilience / recovery as outlined under chapter one and two⁸. This figure should however be reported separately from the total PiN, both to help inform nexus programming but also to avoid an artificially high PiN as the likelihood of most people in a country affected by a humanitarian crisis would end up being included.

In some context the data behind any analysis of vulnerability (as a reflection of resilience) can be used to inform the analysis of the LS and WB consequences. A good example would be the issue of Phase 2 IPC households – analysis here could help justify the inclusion of some groups under that phase in the PiN, or out, considering them rather in the risk and projection analysis.

V. Estimation of the PiN for the “protection” consequence

The suggested way forward for the 2020 HNO season is to treat this humanitarian consequence as a ‘spotlight’ on protection. In line with the “centrality of protection” concept, protection cluster including AORs and in collaboration with other clusters will develop and feature an overall People in Need (PiN) of Protection figure to be included in the “summary of humanitarian needs” as well as “key findings” both for sectoral and intersectoral purposes.

Under the humanitarian consequence “critical problems related to protection”, protection cluster including AORs will also provide visuals/narratives on the following:

⁸ As stated in footnote 5 the ‘resilience PiN’ may be useful when doing risk analysis and looking at the likelihood of some events to happen (e.g. flooding) and how they might affect those who lack the ability to withstand shocks or stresses. It would also be useful for PiN projections (e.g. estimated people with resilience problems would risk falling into ‘wellbeing’ and ‘living standards’ consequences if an event happens, provided they do not receive adequate support from development actors to strengthen their capacity to face some threats (e.g. seasonal flooding).

- Describing the affected population groups, and vulnerable populations in need of protection and how the inter-relations between Protection and other sectors result in a variety of needs, including protection ones.
- Describing the protection environment in relation to three other humanitarian consequences: living standards, physical and mental well-being, resilience and recovery as well as linkages among the four consequences through a protection scope.
- Refer to [this GPC Guidance on Severity Scale and PiN Estimation](#) for a detailed methodology note on how to estimate this PiN.

VI. Estimation of the total PiN for the country

The underlying assumption for calculating the total PiN for the country / crisis is that everyone who suffers from critical problems related to physical and mental wellbeing also suffers from problems related to living standards.⁹ Following this logic, the number of people suffering wellbeing / survival problems will by definition be always smaller than the number of people with problems related to living standards.

The second assumption is that only people with critical problems related to physical and mental well-being and living standards should be counted for the total PiN. The larger group of people affected by recovery and resilience problems are beyond the scope of a purely humanitarian intervention. This implies:

TOTAL PIN = number people with critical problems related to “well-being” (which also present living standards problems) + number of people with critical problems related to ‘living standards’ only (without wellbeing problems).

VII. Estimation of sectoral PiN

Clusters typically employ their own individual PiN methodologies in the HNO. Starting in 2020, there is however less emphasis on the sectoral figures. The sectoral pages in the HNO (which are optional to produce) mainly serve as a place to elaborate on the key findings of the HNO relevant to the sectors, based on the analysis in Section 1.

Cluster PiN calculations should whenever possible be based on those in the inter-sectoral HNO Framework. For example, if the ‘wellbeing PiN’ has been calculated based on combining (i.e. taking the maximum-per-location of) 10 different sectoral indicators, then the WASH PiN could be derived from the same dataset but looking only at the 2 of those 10 indicators that were WASH related. That would produce an entirely consistent Sectoral PiN calculation. If there are any multisectoral

⁹ Note that the HNO (apart from the projection) represents an ‘analysis period.’ We analyze at what stage population groups are, in a progression from having no problems, to having some issues with resilience, to having issues meeting basic needs, to having measurable effects on their wellbeing, and ultimately dying. The HNO frames humanitarian need in this way to enable the response to be planned in terms of criticality to get people moving back through the WB and LS consequences ‘boxes’ towards leaving the resilience recovery ‘box’ and disappearing from the PiN entirely (or become beneficiaries of other assistance frameworks related to long term recovery / development).

indicators used in the overall WB PiN calculation, then each sector could decide if these were relevant to their sector (i.e. reflected an underlying sectoral need) and include them as well.

All estimations of PiN including those employed in the Sector pages should be supported by figures related to impact (number of IDPs, number of damaged buildings, etc.) and status (IDPs living in camps, refugees, female-headed households, etc.), but must be calculated based on the analysis of humanitarian consequences. Whatever method chosen, the cluster PiNs should not be higher than the country PiN. If this issue is encountered, a careful review and adequate explanation is required:

- Are the sectoral indicators correctly reflecting Well-Being or Living Standards consequences (based on the definitions of 'Well-Being' and 'Living Standards' defined in the JIAF and available in the HNO Glossary)?
- Are the severity thresholds used for the sectoral indicators coherent with the thresholds used for the inter-sectoral analysis (based on the description of severity levels of the JIAF, provided in the annotated HNO template/guidance)?
- If answers are negative, then the sectoral analysis should probably be reviewed so that the sectoral indicators and thresholds correctly match the inter-sectoral approach.
- If answers are positive, then it may mean that there are sectoral indicators used for the sectoral PiN which have not been considered for the inter-sectoral analysis while they are capturing unique dimensions of Well-Being or Living Standards - and should in fact be included in the inter-sector analysis. In this case, the latter must be reviewed to include these additional sectoral indicators.

END OF NOTE