Aid Overhaul: The Use of Biometric Aid Delivery Systems in Yemen

The Failures of the International Humanitarian Aid System in Sufficiently Evaluating Aid Needs

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Introduction:

War has engulfed Yemen since the failure of the National Dialogue Council (NDC) to form a government in 2015. There have been repeated attempts to bring, if only temporary, peace to the country, yet no agreement has been able to end the conflict, and the Yemeni people are the ones that are paying the ultimate price. Emerging from this conflict is the worst humanitarian crisis in the world. According to the United Nations, over 24 million Yemenis are in need of humanitarian aid, the majority of whom are living in Houthi controlled areas.[1] While millions of Euros have been provided by the international community, the aid system in Yemen remains inadequate to address the severity of the situation, and repeated failures to implement various systems, such as biometric technology for aid delivery, only reaffirm this level of incompetence.

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1 https://www.unocha.org/yemen/about-ocha-yemen;
https://reliefweb.int/sites/reliefweb.int/files/resources/yemen_humanitarian_needs_overview_hno_2018
_20171204_0.pdf

KEY TAKEAWAYS

- The humanitarian aid system in Yemen needs to be completely restructured to more effectively deliver aid.
- Biometric technology poses significant threats to vulnerable populations and their data.
- Without a full understanding of some of the consequences to biometric technology, international aid organizations will continue to struggle to implement this system in Yemen.
- The humanitarian crisis in Yemen is bleak, and aid organizations must prioritize civilians' access to aid above political motivations and technology that may not be adequate in a Yemeni context.
- Humanitarian efforts in Yemen should continue to be funded by the international community, with focus on improving the livelihoods, rather than creating a dependency on aid.

The international community's presence in Yemen has undoubtedly saved millions of lives, however more needs to be done to ensure that civilians are prioritized in humanitarian missions, rather than political objectives. Ultimately, the humanitarian aid system in Yemen is in desperate need of re-evaluation.

Drivers of Famine in Yemen:

Discussions surrounding the humanitarian crisis in Yemen have massively oversimplified the driving factors behind the humanitarian emergency, attributing the famine merely to the war and the internationally backed blockade on imports and deliveries into Yemen in past years. By failing to acknowledge that the famine is impacted by additional factors, such as pre-war economic conditions; conflicting parties within Yemen, with various warring parties at a local, state and international level; [2] Yemenis' dependency on international aid handouts;[3] as well as a lack of capacity for international aid organizations to access and distribute aid throughout the entirety of Yemen,[4] the very basis of the humanitarian mission in Yemen is inadequate. This assessment of the humanitarian aid system in Yemen was conducted through thorough analysis of aid reports as well as interviews with local humanitarians working in Yemen, most notably Muna Luqman, founder of Food for Humanity, a local NGO working on food distribution throughout Yemen.

Since the humanitarian mission began, far before the conflict broke out in 2015, the international organizations present in Yemen have struggled to connect with local organizations to improve the capacity and reach of their mission. While many aid organizations are present in areas with high concentrations of people, there are areas that are still inaccessible by aid organizations, according to Muna Luqman, who has been working on local food distribution and humanitarian projects in Yemen since 2017.

Furthermore, one of the major pitfalls of the aid mechanisms in Yemen is the neglect for long-term, strategic procedures which benefit the livelihoods of civilians, rather than increasing their reliance on humanitarian assistance programs. Most often, aid organizations have focused on delivering aid to civilians, without addressing the dependency that people have developed from these aid deliveries. Instead of developing programs to reduce dependency on aid, international organizations working in Yemen have attempted to bring in new technologies to streamline aid delivery, only furthering the reliance people have on aid.[5] Ultimately, the disparity between the amount of aid that is being channeled into Yemen from the international community and the disinterest to work towards long-term, sustainable support systems, which aim to reduce the reliance on aid handouts, only reaffirms the international community's failure to facilitate better livelihoods for Yemenis.

Biometric Technology:

Humanitarian aid organizations, such as the World Food Programme (WFP) and the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), have encountered enormous obstacles in light of increasing levels of violence, corruption and instability in the conflict in Yemen. For years now, all sides of the conflict have been guilty of diverting, stealing and obstructing aid deliveries. International institutions blame the Houthi rebels for diverting aid, while the Houthis have accused the same aid organizations of delivering rancid food supplies.[6] The humanitarian aid system in Yemen remains tumultuous at best, and all parties of the conflict must prioritize civilian lives, as the people of Yemen pay the highest price for the tensions between aid organizations and rebel actors.

Barriers in distributing humanitarian aid within the context of the conflict have forced aid organizations to find alternative measures to bring aid to civilians, specifically those who live in

2https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief%208%20Yemen.pdf

3 Interviews with Muna Luqman, founder of Food for Humanity and Chairperson for the Woman Solidarity Network in Yemen.

4https://www.devex.com/news/biometrics-disagreement-leads-to-food-aid-suspension-in-yemen-95164

5https://www.nytimes.com/2019/07/11/opinion/data-humanitarian-aid.html

6https://www.middleeastmonitor.com/20200206-aid-to-houthi-controlled-yemen-to-be-cut-back-over-risk-it-can-be-diverted/

areas more difficult for these organizations to access. Ongoing complications have made the delivery of humanitarian aid, specifically food, water and medicine, to remote areas of the Yemen nearly impossible.[7] The WFP has been trying to implement a biometric aid delivery system for several years now, but has been unable to gain approval from the Houthis, despite several negotiations with the group.[8] The persistence of the WFP to implement this aid delivery system is driven by continuous corruption and stealing of aid, by multiple parties, who are diverting aid from its intended recipients. While the use of biometric technology has been identified as one mechanism to support safe and consistent aid distribution, there are many concerns surrounding this technology that are not being addressed by the aid institutions. These concerns have great legitimacy, which could be reason as to why the biometric aid delivery system hasn't been fully implemented in Yemen.

The inability of the WFP to negotiate the biometric aid delivery system in Yemen raises question to the advantages and disadvantages of this technology, and whether this type of aid delivery system is suitable in the context of Yemen. First and foremost, it is important to understand what biometrics are and further, what they are used for. In order to understand why this technology is significant to the aid distribution system, a definition of biometrics must be made clear. "Biometric data are any automatically measurable and distinctive physical characteristics that can be used to identify an individual, usually gathered from either fingerprints, iris scans or facial scans."[9] The technology can be used to establish a database for beneficiary registration, allowing individuals to register into the system to obtain their allotted amount of aid. Humanitarian organizations are able to gather biometrics on those in need of aid, in order to more effectively measure to whom and where the aid is going, however there are major security concerns in the means of collecting and processing data, particularly in an age where

cyberattacks on personal information are a legitimate risk.[10] The following sections will explore some of the justifications in favor of biometric technology, followed by the consequences that are vital to the discussion in bringing biometrics into a humanitarian context in Yemen.

1. Preventing Fraud Using Biometric Technology: Claims and Concerns

The use of this technology has been cited to identify people targeted for aid assistance, reduce fraud and duplication of aid, and to simplify the registration and identification of individuals.[11] Humanitarian organizations have been fighting to implement this technology since 2017, and while successful in other contexts, such as Jordan, Nigeria and Uganda, the conflict in Yemen has proven to be a problematic environment to implement a biometric aid system.[12] The foremost justification in advocating for biometric technology in a humanitarian context is that the technology helps to reduce fraud and corruption during distribution. However, these claims lack an explanation of how biometric technology can actually produce viable solutions for reducing fraud, given that the distribution system in Yemen is quite complex and there are multiple opportunities for fraudulent activity in the supply chain.[13]

Biometrics, while being a promising type of technology applicable in many contexts, seems too ambiguous to be properly applied to the Yemeni context. The lack of evidence in being used to prevent fraud at all levels has been under evaluated, with the focus remaining on 'downstream fraud' at the level of the aid recipient rather than on 'upstream fraud' where

7 Interview with Muna Luqman.

8https://www.biometricupdate.com/202002/wfp-biometric-aid-delivery-system-still-not-fully-launched-in-yemen-humanitarian-operation-in-jeopardy

9https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf

10https://www.biometricupdate.com/202006/biometrics-pose-highest-challenge-to-data-controls-in-humanitarian-efforts-red-cross-says

11 https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf

12https://www.thenewhumanitarian.org/opinion/2019/07/17/head-head-biometrics-and-aid; https://www.biometricupdate.com/201710/un-agencies-increasingly-using-biometric-registration-to-target-aid-in-conflict-areas

13https://www.thenewhumanitarian.org/opinion/2019/07/17/head-head-biometrics-and-aid

the supply chain is more likely to be impacted by fraud or the diversion of aid.[14]

According to a report conducted by Oxfam, dissecting the pros and cons of this type of technology within a humanitarian context, there is little evidence to prove whether biometrics can help reduce fraud.[15] The foundation of biometric technology and its function in Yemen must be comprehensively understood, not only in the specifics of how fraud will be reduced, but also in how humans interact with these biometric systems.[16] There has been limited research on the effects of this technology, particularly within the context of Yemen, where many issues of aid distribution exist in multiple contexts.[17] Simply put, there are too many factors and areas for fraud or corruption of aid to occur throughout the supply chain, limiting the claim that biometric technology will reduce the levels of fraudulent aid handouts. A full understanding of how aid organizations will be able to use biometric technology to reduce fraud in aid handouts should be explicitly shared by these institutions hoping to implement this technology.

2. Gathering of Data: Reducing Duplication through Database Formation

The second justification for implementing biometric technology is that it reduces the duplication of aid, ensuring that each recipient of humanitarian assistance receives their intended amount. Under a biometric aid system, when people go to collect their aid, each person is cross checked against a data system, ensuring that they are registered into the system via their personal data (iris scans, facial recognition, etc.).[18] Under a biometric system, each person would be individually responsible for collecting their own aid,

which could result in high operational costs in getting every person registered in the system. Given the large gender disparity that exists in Yemen, woman face greater challenges in collecting aid, and subsequently are more susceptible to going without food or being malnourished.[19] Many of the current distribution systems allow a representative from each household to collect aid, either through direct handouts, cash-transfers, or food credits.[20] As Muna told me in our interview, the large gender disparity has significant impacts to the humanitarian aid sector, and aid handouts are usually gathered by male members of the household.[21] The current distribution systems, which could potentially be replaced by biometric technology, are inadequate for multiple reasons, but there is substantial concern that women are disproportionately susceptible to food insecurity and chronic hunger.

It should be noted that there are significant barriers to the aid distribution system in Yemen, and that there is no standardized mechanism to circulate humanitarian aid throughout the country, mainly due to the obstacles that the conflict has constructed. As there is no one system currently in place, the means of implementing a biometric aid system for the entire country (even if only in certain areas) inherently oversimplifies the challenges of aid distribution in Yemen.

Further, the supply chain as a whole has been put under pressure due to the COVID-19 pandemic, adding an additional element to the already fragile aid delivery mechanism.[22] The Houthis have been using the pandemic as an excuse to further prevent the biometric technology from being employed, saying that it could contribute to the spread of the virus.[23] Evidence for this claim is lacking, however the low levels of immunity in

14 https://blogs.icrc.org/law-and-policy/2019/10/18/innovation-protection-icrc-biometrics-policy/;
https://www.thenewhumanitarian.org/opinion/2019/07/17/head-head-biometrics-and-aid
15 https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf
16 https://www.nap.edu/catalog/12720/biometric-recognition-challenges-and-opportunities
17 https://blogs.icrc.org/law-and-policy/2019/10/18/innovation-protection-icrc-biometrics-policy/
18 https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf
19https://www.wfp.org/emergencies/yemen-emergency#:~:text=Malnutrition%20rates%20among%20women%20and,them%20with%20special%20nutrition%20support.

20 https://www.unicef.org/yemen/emergency-cash-transfer-project#:~:text=In%20an%20effort%20to%20prevent,the%20Yemeni%20population%2C%20as%20well
21 Interview with Muna Luqman; https://www.wfp.org/emergencies/yemen-emergency#:~:text=Malnutrition%20rates%20among%20women%20and,them%20with%20special%20nutrition%20support.
22 https://www.rescue-uk.org/sites/default/files/document/2276/irc-yemenstripleemergency-july2020.pdf
23 https://bit.ly/30F7cak

Yemen add an additional element to consider when working to distribute aid safely. Distributing aid is a substantial undertaking, and ensuring that aid reaches its intended recipients is only further complicated by the pandemic.

3. Information Sharing: Prioritizing Politics over People:

Concerns surrounding the use of biometric technology exist at multiple levels. Significantly, there is a disconnect between those whose information is being collected and what that data means and is being used for. [24] As of now, the humanitarian organizations that are attempting to implement biometric aid systems, have not disclosed what is being done with the gathered information, beyond the cross-checking the information within the data system. [25] There are different ways that an individuals' data can be cross-checked with the data system, but what is not being disclosed is if the information is being used for other purposes beyond confirming identities. Concerns of privacy must be at the forefront of the discussion for implementing biometric technology in Yemen. The Houthi rebels have expressed their apprehension to this technology, calling it an 'intelligence operation'.[26] In protest of the Houthis refusal to allow the biometric technology into their areas of control, the WFP partially suspended aid to Sana'a residents in June 2019.[27] This suspension of aid is reflective of the inability of international aid organizations to work with the Supreme Council of the Management and Coordination of Humanitarian Affairs, the Houthi body tasked with humanitarian affairs to find alternative solutions in providing safe and consistent access to aid.[28]

The amount of data that is being collected, and subsequently who has access to it, must be clear, prior to implementing this technology. In 2019, the WFP partnered with a US company called Palantir

Technologies, who has contracts with the Pentagon, the CIA and US Immigration and Customs Enforcement (ICE) on various counter-terrorism projects, raising concerns about what the data that WFP gathers could be used for.[29] In subjecting vulnerable populations to mandatory data collection in return for food aid, without their full understanding of what their data will be used for, or who will have access to the information, is dangerous and unethical.

There are ways to monitor the distribution of aid, ensuring proper allocation and safety of individuals without exploiting the data of vulnerable populations.[30] The mandate of trading personal data in biometric aid systems for survival is not proportional, and within in the context of conflicts where vulnerability is exacerbated, information of civilians cannot be exploited. Many of these concerns are not being addressed by the very institutions that have been working to implement the technology in Yemen. Access to data in conflicts can be invaluable, and in the hands of certain actors this information could put millions of people's lives at risk. [31] The politicization of human data, specifically within the context of conflicts is extremely dangerous, and without proper transparency and education on how the data is being used and who has access to it, biometric technology should not be used in aid distribution, in Yemen or anywhere else.

Restructuring Aid in Yemen:

The international aid system that is currently in place in Yemen, has seen a decrease in funding for 2020, due to pressure from large donors, citing increasing levels of violence, corruption in aid distribution, as well as aid looting by the Houthi rebels. [32] Aid organizations are scrambling to secure financial support, as well as appease donors concerns, but without consistent funding or the fulfillment of promised funds, the lives of millions are further threatened, and the

24https://www.nap.edu/catalog/12720/biometric-recognition-challenges-and-opportunities

25 https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf

26 https://globaldatajustice.org/2019-06-21-biometrics-WFP/

27 https://www.devex.com/news/biometrics-disagreement-leads-to-food-aid-suspension-in-yemen-95164

28 https://www.scmcha.org/en/

29https://www.cnbc.com/2019/03/27/palantir-in-multi-million-dollar-pentagon-deal-ipo-on-horizon.html; https://www.thenewhumanitarian.org/opinion/2019/07/17/head-head-biometrics-and-aid

30https://www.nytimes.com/2019/07/11/opinion/data-humanitarian-aid.html

31https://www.devex.com/news/biometrics-disagreement-leads-to-food-aid-suspension-in-yemen-95164

32 https://www.rescue.org/press-release/alarming-drop-funding-yemen-millions-lives-are-jeopardy-warns-irc

humanitarian crisis is only exacerbated by COVID-19.[33] The north of the country, where the majority of the population is present and the Houthis maintain majority of the control, funding is being withheld to projects and organizations because of these concerns.[34] Beyond the lack of funding and the concern from international donors regarding the diversion of aid, many support the implementation of biometric technology.

Consequently, many donors do not fully understand what the consequences of implementing this technology could have on Yemenis, or these actors potentially have ulterior motives in condoning the politicization of humanitarian relief. [35] Accessing accurate and updated information on the humanitarian crisis is difficult and the reports outlining this information are undertaken by the very organizations that operate or providing funding to the aid system in Yemen, rather than unbiased actors, creating a vicious cycle of insufficient information that is potentially politically motivated or incomplete.

Regardless of the levels of corruption in aid distribution, the people of Yemen remain the victims of the inability of aid organizations to effectively deliver aid throughout Yemen. Significantly, the environment in which international aid organizations function in remains volatile, but suspending aid as a political bargaining tool for a technology system, as opposed to working more closely with local Yemeni organizations to continue the delivery of aid, is a failure on behalf of the international aid organizations.

Key Insights and Conclusions:

The conflict in Yemen exemplifies multiple failures of the international community, perhaps most evidently in regard to the humanitarian aid crisis, which has left over 80 percent of the population reliant on humanitarian assistance. The desire to implement a biometric aid delivery system throughout the country, and using it as leverage to suspend aid into Yemen in order to negotiate the implementation, should be re-evaluated. Research into how the data is being used, where it is being stored, and the levels of awareness that people have when submitting to sharing their personal information should be undertaken by the international organizations who are attempting to implement this technology. As well, greater levels of transparency on the outcomes of a biometric aid system should be mandatory, with importance on the human impact of gathering data from vulnerable populations. Within the context of Yemen, the dire need for humanitarian aid should be recognized as the sole purpose of humanitarian organizations to continue to deliver aid, unobstructed, without political motivations preventing aid or funding into the country. Promoting engagement with Yemeni organizations working in the humanitarian sector is an area of opportunity for the international organizations to ensure greater accessibility to aid, with the assistance of local expertise, to best help the population. Ultimately, there is no solution to the humanitarian crisis without an end to the conflict. Until a lasting peace agreement can be reached, the people of Yemen will continue to pay the highest price for the conflict, and millions of lives will continue to be put at risk. The international community must ensure the humanitarian aid is prioritized in Yemen, through the establishment of beneficial livelihood measures, alongside the efforts to de-escalate the conflict.

33 https://www.rescue-uk.org/report/yemens-triple-emergency-covid-19-conflict-and-collapsing-international-response?edme=true

34https://www.hrw.org/news/2020/05/22/yemen-displaced-heightened-covid-19-risk

35 https://globaldatajustice.org/2019-06-21-biometrics-WFP/

BIC Policy Recommendations:

Towards International Aid Organizations Working in Yemen:

- The humanitarian aid system in Yemen must be completely re-evaluated. In order to understand where funding is going, how it can best be allocated to help people, through transparent evaluation set forth by multiple, international aid organizations working in Yemen.

    o External experts who have been working on humanitarian aid efforts in other countries could provide valuable insight to what could make the aid mission in Yemen more effective, in strong coordination with local civil society organizations.

- The international community must remain skeptical towards implementing a biometric aid mechanism in Yemen, particularly given the previous failed attempts to bring in such a program. Fraudulent and corrupt aid delivery can exist in multiple contexts and bringing in biometric technology, which could threaten the personal information of civilians, may not solve issues of aid diversion.

- In working to improve the humanitarian aid system in Yemen, international organizations should prioritize strategic mechanisms that emphasize improving livelihoods of Yemenis, rather than creating a reliance on humanitarian air handouts.

To the Houthis and the Supreme Council of the Management and Coordination of Humanitarian Affairs:

- In compliance with international law, the Houthis must facilitate consistent and unimpeded access for humanitarian aid relief, independent from the negotiations with aid organizations on how to manage the distribution of aid using biometric technology. Noting that while no agreement has been reached on the use of this technology, civilians continue to suffer without access to aid.

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