

Rakhine: A Famine in the Making

November 2024

Rakhine stands on the precipice of an unprecedented disaster. A perfect storm is brewing due to a chain of interlinked developments. With restrictions on goods entering Rakhine across international and domestic borders, absence of incomes, hyperinflation, significantly reduced domestic food production, and a lack of essential services and a social safety net, an already highly vulnerable population may be on the brink of collapse in the coming months.

Based on data collected by UNDP across Rakhine in 2023 and 2024, which includes direct data collection, interviews with key stakeholders (e.g., private sector, associations), surveys by civil society organizations, as well as other data regularly provided by the UN system, Rakhine's economy has stopped functioning, with critical sectors such as trade, agriculture, and construction nearly at a standstill.

People's incomes are collapsing because export-oriented, agro-based livelihoods in Rakhine are disappearing as the domestic and international markets are no longer accessible due to blockades. Additionally, the construction sector – a major employer – is shutting down as imports of cement from neighbouring countries have stopped, leading to an exorbitant price increase for this critical intermediate good.

Rakhine could face acute famine imminently. Predictions indicate that domestic food production will only cover 20% of its needs by March-April 2025. Internal rice production is plummeting due to a lack of seeds, fertilizers, severe weather conditions, a steep rise in the number of internally displaced people (IDPs) who can no longer engage in cultivation, and escalating conflict. This, along with the near-total cessation of internal and external trade, will leave over 2 million people at risk of starvation.

Since Myanmar's independence in 1948, Rakhine has ranked as the poorest or second-poorest state in the Union. Deepening inequalities¹ and poverty, along with the absence of central government structures (while alternative Ethnic Organization Structures are still emerging), will further strain the already fragile state of social cohesion. Inter-communal relations in Rakhine had shown localized signs of improvement in the past two years. However, the recent escalation of manipulation of ethnicity along with the imminent economic catastrophe, will deepen marginalization, disenfranchisement, and ultimately put intercommunal relationships at even greater risk than ever before. As the crisis worsens, the lack of resources and opportunities will continue to fuel tensions and trigger a greater exodus of youth and families, with irregular migration (e.g., people without identity documentation and/or no SAC authorization to move within or outside Rakhine) expected to intensify. This would have repercussions both within Myanmar and beyond its borders, where this trend is already observable. Without safe avenues for escape, we anticipate an increase in human trafficking, particularly among the vulnerable Rohingya population. Under these anticipated conditions, the scenario of repatriating over a million Rohingya is simply inconceivable.

The current restrictions on the flow of goods will isolate Rakhine from the rest of the country and will significantly increase the suffering on an already vulnerable population. This, along with the continued upsurge in violence poses serious challenges for countries in the region. Key stakeholders, particularly neighboring countries, should consider adjusting their policies and initiatives considering international principles. This includes opening borders for trade and aid.

Without urgent action, 95% of the population will regress into survival mode, left to fend for themselves amid a drastic reduction in domestic production, skyrocketing prices, widespread unemployment, and heightened insecurity. With trade routes closed and severe restrictions on aid, Rakhine risks becoming a fully isolated zone of deep human suffering.

The following immediate steps should be taken:

- Goods must be allowed to enter Rakhine. All restrictions currently in place within Myanmar should be lifted, and all parties should ensure commercial goods can enter and exit Rakhine. Furthermore, opening the Bangladesh border for business-to-business channels directly with Rakhine would provide immediate supplies to local markets. The same applies to the Indian border, which is an unpredictable channel for items like rice seeds and fuel that support economic activities in central Rakhine.
- Aid to meet urgent critical needs and restore at least basic livelihoods must be provided without interference by any party to the conflict.
- Unimpeded access and safety for aid workers must be ensured by all parties.
- Sufficient financial resources to support lifesaving and recovery needs must be urgently made available to scale up assistance, over and above immediate life-saving needs.

The following sections elaborate on the rationale and data supporting the points above.

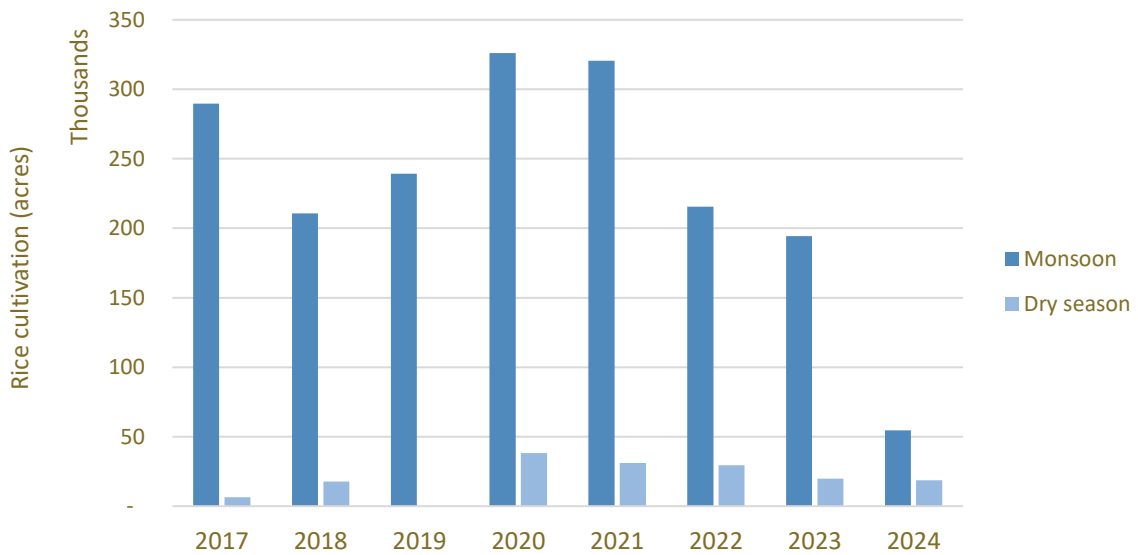
¹ The Gini coefficient of income distribution in Rakhine rose from 0.17 in 2015 to 0.24 by 2023 (41% increase).



I Heavily impacted agricultural sector

Since November 2023, when Operation 1027 expanded into Rakhine, Rakhine’s food insecurity has been accelerating at an alarming pace and, if unaddressed, is projected to lead to famine conditions by mid-2025. The collapse is being driven by multiple factors, including the drastic reduction in rice cultivation in 2024 (Figure 1), trade blockades (Figure 2) and restrictions on fisheries. These are causing spiraling inflation of food prices, particularly rice, which constitutes the staple diet of the population. Based on collected data and reports, food availability and affordability are fully compromised.

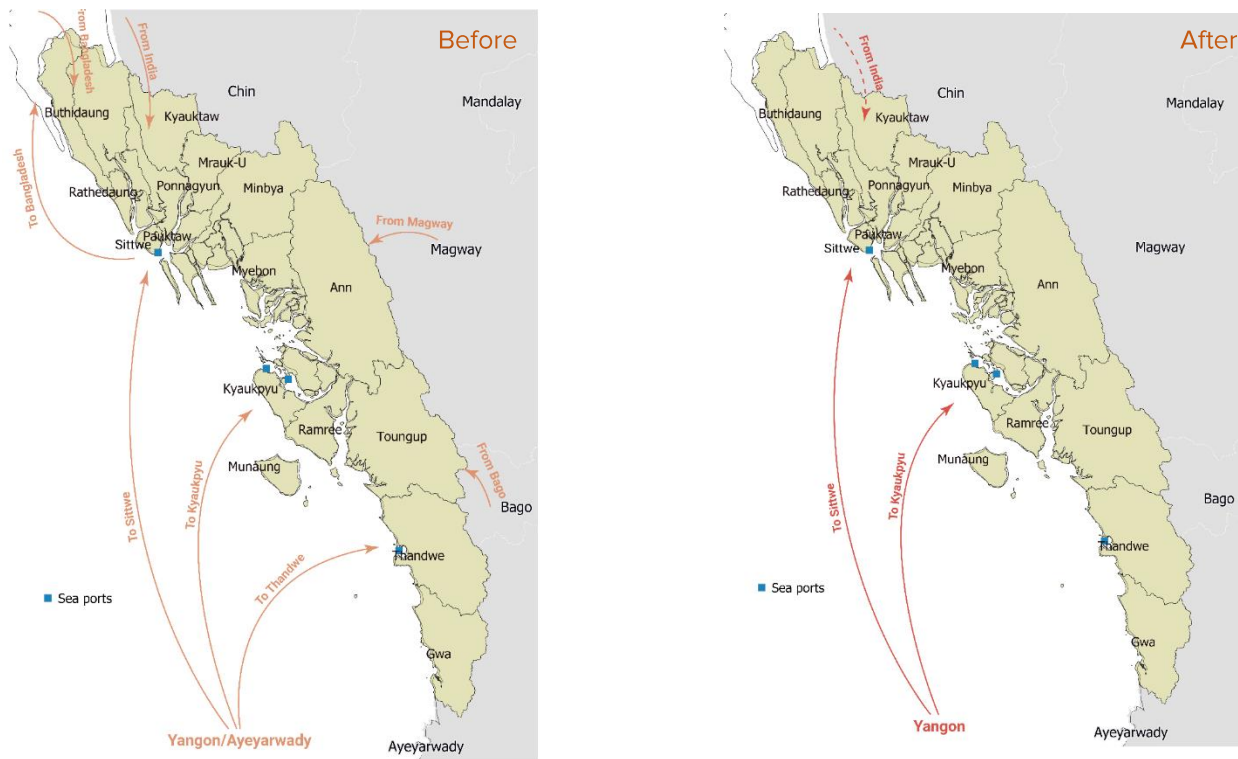
Figure 1. Rice cultivation (UNDP's estimation based on satellite imagery)



This projection is based on several worrisome trends:

- Land cultivation patterns in 2024 suggest that only 97,000 tons² of rice will be produced within Rakhine. The estimated 2024 production is grossly insufficient, as it would only cover a mere 20% of the population’s food needs.³
- The data above should be compared with 2023⁴ data, when Rakhine produced an estimated 282,000 tons of rice, covering 60% of the population’s needs. The remaining 40% had to be met by supplies from other parts of the country, which was already problematic due to blockades put in place in early November 2023. This resulted in a significant reduction in food consumption, as documented in various surveys, including UNDP’s *People’s Pulse 2023* report.
- The shortfall to ensure food security amounts to at least 372,000 tons of rice in 2025 for the full year or 186,000 tons for the first six months. This shortfall will need to be met by supplies from outside Rakhine. Yet, both internal and external trade are heavily restricted. With usual trade routes blocked and food aid supplies in Rakhine are already depleted with imports restricted, it is expected that the large gap cannot be filled.

Figure 2. Trade routes (before and after the 1027 related blockades)



² All weight measurements in this paper are expressed in US tons, equivalent to approximately 907.185 kilograms.

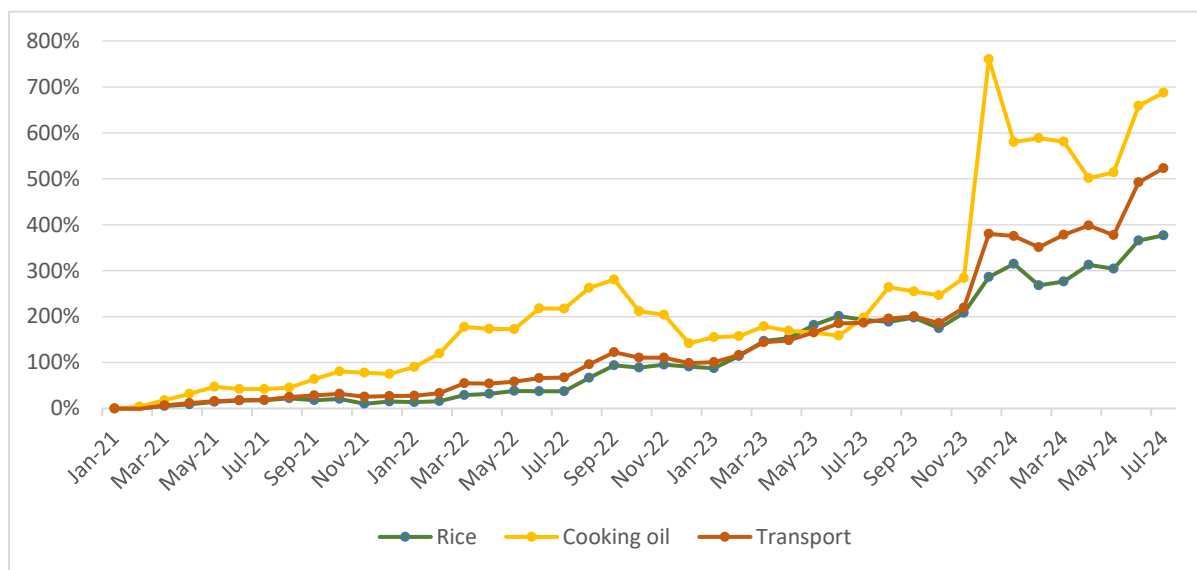
³ The calculation of the sufficiency of rice production in Rakhine for 2024 is based on an estimated rice consumption of 170 kilograms (or 0.178 tons) per capita per year for rural areas in Myanmar. With a projected production of 97,000 tons, this would provide enough rice to feed approximately 0.52 million individuals (97,000 tons ÷ 0.187 tons per capita), which accounts for roughly 20% of the estimated population of 2.6 million in Rakhine. This population estimate assumes an approximate 20% out-migration from an original population of 3.2 million, based on UNFPA data.

⁴ 2023 was already a critical year because of the impact of Cyclone MOCHA, which required a significant investment by the international community to ensure the rice production would be sufficient to address most of the population needs.

II Prices

As the Figure 2 indicates, the number of trade routes bringing essential supplies into Rakhine dwindled to only two after October 2023. Previously, there were at least 8–10 routes, which are now blocked, leading to acute shortages of rice, fuel, and other essential items, and consequently, skyrocketing prices.

Figure 3. Price trends of essential goods (source: WFP's price monitoring data)



The prices of essential products have increased dramatically since the closure of official trade following Operation 1027 in Rakhine. The most substantial price hikes for rice were observed in Maungdaw (944%), Toungup (487%), Sittwe (404%), and Myebon (411%) by July 2024.

The price of cooking oil (palm oil), an essential product imported from outside Rakhine, increased by 687% by July 2024 compared to January 2021. Gwa Township, which is close to Ayeyarwady region, experienced the least increase (425%), while Mrauk-U and Toungup saw more substantial hikes in cooking oil prices, 957% and 980%, respectively.

Transport costs increased by 523% by July 2024 compared to January 2021. Significant hikes in transport costs were seen in Maungdaw (817%), Myebon (611%), and Toungup (581%) during the same period. The rise in transport costs is closely associated with the increasing price of fuel used in transportation as well as security-related risks.

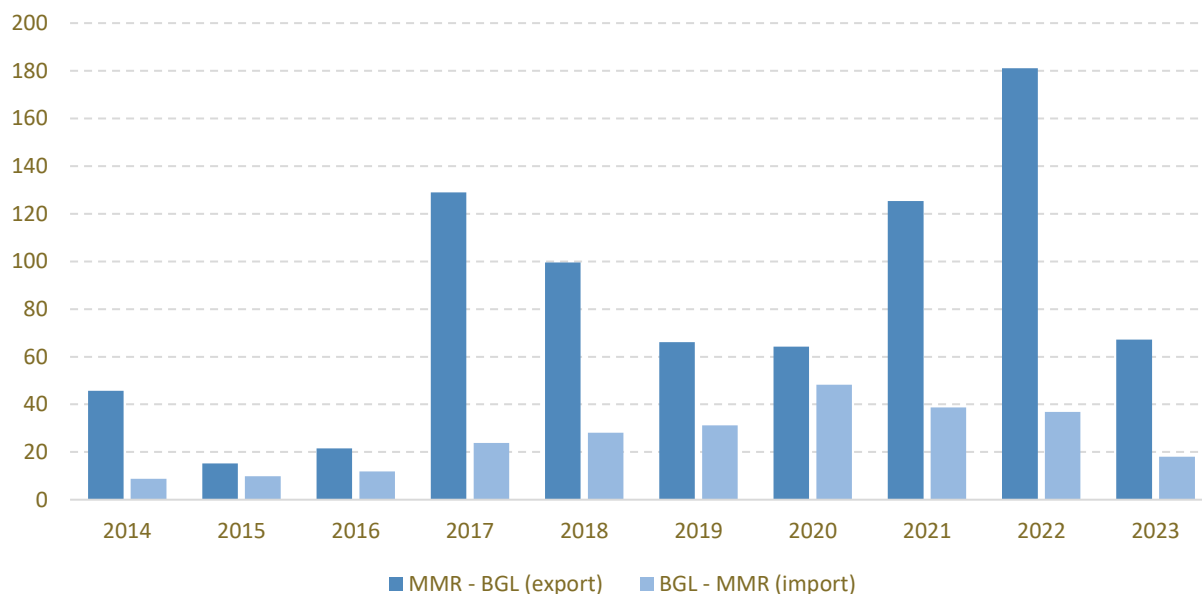
The abnormal increase in prices for essential products is *due to limited imports through circuitous and therefore much more expensive routes from outside Rakhine*. Informal channels have emerged, such as the one that brings goods from Mizoram (India) into Rakhine through Chin. However, the flow has been very irregular and largely based on informal arrangements. The number of monthly shipments of goods from Yangon to Rakhine is down to two from ten prior to October 2023 and commodities are severely restricted.

III Reduction of trade volume with Bangladesh

Bilateral trade between Bangladesh and Myanmar was historically conducted primarily via the territory of Rakhine. However, the dynamic changed after the 2017 Rohingya crisis and then, for a second time, after the 2021 military takeover when the SAC imposed most of the trade to be channeled through Yangon or Nay Pyi Taw. The monthly bilateral trade volume between Bangladesh and Myanmar amounted to around USD 20 million in 2022. Bangladesh mainly exports fresh potatoes, cement, apparel, textile waste, soft drinks, biscuits, live eels, and fish to Myanmar, and imports dry fish, chilled fish, ginger, onion, Burma teak wood, Garjan wood, plum pickle, red chilies, and coconut from Myanmar.

Trade between Bangladesh and Myanmar has plummeted to a mere USD 7 million per month, directly linked to the escalation of conflict in Rakhine, which has caused significant economic losses on both sides. For the population of Rakhine, this implies a significant loss of livelihoods from the export of agro-based products mentioned above and the skyrocketing prices shown earlier.

Figure 4. Declining trade volume (source: UNCTAD)



The SAC authorities promoted and encouraged exports from Rakhine to Bangladesh via Yangon in the years immediately after the military takeover and up to November 2023⁵. The local Rakhine SAC authorities attributed the reduction of trade to the prevention of the spread of COVID-19 infections from the border trade areas to Sittwe and Maungdaw⁶.

⁵ <https://www.gnlm.com.mm/myanmar-to-ship-100000-tonnes-of-rice-to-bangladesh-under-g2g-pact-for-fourth-time/>

⁶ The Advocate General of the Rakhine State Government, U Hla Thein, said in a recent statement that the "State Government is paying attention on the tasks carefully since the cases of two omicron subvariants BA.4 and BA.5 occur. We

Rakhine is endowed with fertile agricultural lands and sizable offshore hydrocarbon reserves. Its geopolitical significance has been reinforced by Chinese and Indian interests in the region, illustrated by the China–Myanmar Economic Corridor (CMEC), part of the Belt and Road Initiative, and the Kaladan Multi-Modal Transit Transport Project.

IV Disruption of the construction sector

The construction sector in Rakhine, which used to provide employment for many, particularly in urban areas, has been severely affected by the ongoing conflict and blockades. This sector had seen significant growth after the 2010 reforms under President Thein Sein's administration.⁷ It employed both skilled and unskilled labor, with an estimated 10% of households in Rakhine dependent on incomes earned from this sector. Prior to the recent conflict, even small construction businesses employed, on average, around 100 workers each, including daily casual laborers and permanent workers, thereby supporting income for an estimated 500 family members. However, since the escalation of conflict in October 2023, most construction activities have stopped.

About one-fourth of the skilled labor in the construction sector came from outside Rakhine. Transport restrictions and ethnic tensions have led to a shortage of skilled labor from Yangon and other places. Many workers fled, fearing for their safety, which further exacerbated the labor shortage. The absence of skilled labor has made it near impossible to continue construction projects.

In addition, prices of essential construction materials such as cement (mostly imported from Bangladesh), iron, and steel have risen dramatically due to transportation blockages after the conflict intensified. For instance, since November 2023, the price of a bag of cement increased from 12,000 MMK to 140,000 MMK, and the price of iron per ton rose from 1.6–1.7 million MMK to over 3 million MMK. These rising costs have made fixed-price contracts in the construction sector untenable, forcing many contractors to cease operations.

The combination of high material costs, labor shortages, and transport restrictions has caused construction activities to cease entirely. Many construction projects were left incomplete, and contracts had to be terminated without the possibility of extension. This has had a significant impact on the local economy, as the construction sector was one of the major sources of employment and economic activity for many households in Rakhine outside of agriculture, including displaced populations.

have speeded up COVID-19 tests for boatmen returning from Bangladesh. First, all the crews are tested simultaneously while ships are being anchored in the middle of water and let the positive patients get treatment at Sittwe Hospital. Three positive cases were detected last month and all of them have discharged from the hospital."

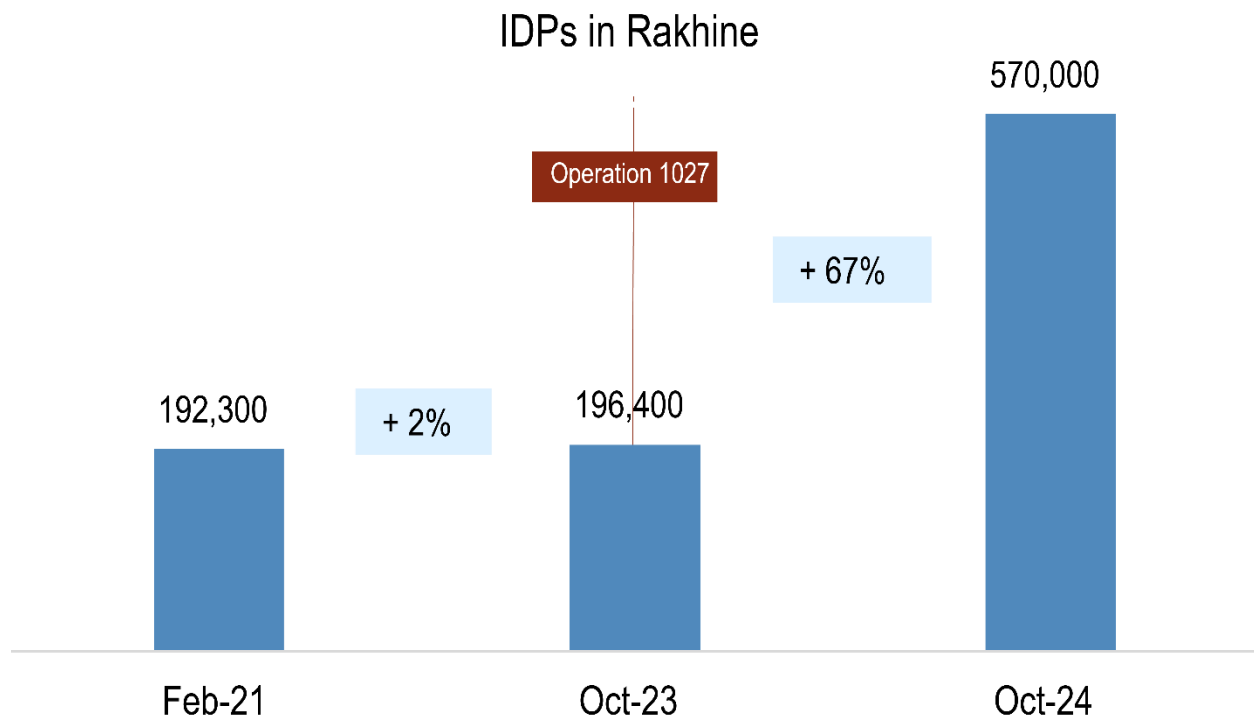
⁷ <https://oxfordbusinessgroup.com/reports/myanmar/2016-report/economy/the-nuts-and-bolts-with-the-construction-industry-expanding-apace-myanmar-is-turning-its-attention-to-building-regulations-and-standards>

V Hardships of the most vulnerable population

The crisis in Rakhine has varied impacts on different demographics, including children, women and girls, youth, and the elderly. The situation is dire for the Rohingya population in northern Rakhine. Many Rohingya families lack full citizenship rights, restricting their movement within Rakhine. The SAC has taken advantage of the vulnerability of Rohingya youth by forcibly conscripting them and subsequently sending them to the frontlines with hardly any training against the Arakan Army, which further intensifies tensions between communities⁸.

IDPs, currently numbering 570,000 people⁹, are particularly vulnerable, as they are entirely reliant on aid from UN agencies, NGOs, and the local community. With aid restrictions and the limited resources of the local community, their situation is increasingly precarious. There have been cases from Buthidaung where some IDPs have resorted to eating rice bran, typically used as animal feed. In July 2024, the occurrence of diarrhea among children was exacerbated by a lack of essential medical supplies, leading to more than three dozen confirmed deaths –the real number could well be many more. Additionally, there are increasing reports of skin disorders (such as dermatosis) among Rohingya IDPs in southern Buthidaung.

Figure 5. Rise in IDPs (source: UNHCR/OCHA)



⁸ <https://www.hrw.org/news/2024/04/10/myanmar-military-forcibly-recruiting-rohingya>

⁹ OCHA Situational Update 31 October 2024. The number combines the IDPs in Rakhine and Paletwa township (Chin) to capture the IDPs from Rakhine most accurately.

The unavailability of sanitary pads has significant social and health implications for girls and women. Contraceptives are not available, and pregnant women cannot access necessary prenatal care, posing potential health risks for both mother and child. Nutritional supplements for children are scarce, and milk powder is prohibitively expensive. Oral rehydration solution (ORS) sachets are 30 to 50 times more expensive in Rakhine compared to Bangladesh.

The elderly do not have access to necessary medications, such as those for hypertension. In AA-controlled areas, while there are doctors, nurses, and paramedics, the required medicines are often unavailable. HIV patients cannot access antiretroviral (ARV) medicines. Some elderly individuals have reached critical stages, experiencing severe mental health issues and physical ailments, such as paralysis, due to the lack of medication. Primary healthcare services are almost non-existent, and even basic medicines like paracetamol are sold at exorbitant prices, 6,000 to 7,000 MMK per blister. ORS sachets cost 10 to 20 times what they cost across the border in Bangladesh. Routine vaccinations have fully ceased.

Even in Sittwe, controlled by the SAC, although there are doctors, there is a severe shortage of medicines, and hospitals have been impacted by conflict. The compounded effects of food insecurity, lack of medical supplies, and movement restrictions create a precarious situation for these vulnerable groups.



VI Looking at the numbers behind the extreme vulnerability

According to the Minimum Expenditure Basket (MEB) for 2024 (reflected in figure 6)¹⁰, a household with an average of 4.31 members requires a minimum expenditure of 480,796 MMK to avoid resorting to negative coping mechanisms. Of this amount, 65% is allocated for food expenditure, totaling 314,784 MMK. Specifically, 23.8% of the food expenditure, or 74,844 MMK, is designated for rice consumption.

In rural Myanmar, the estimated annual rice consumption per capita is 170 kilograms¹¹ translating to a monthly requirement of 14 kilograms per person. Based on WFP’s price data for Rakhine, purchasing 14 kilograms of rice in July 2024 would require 47,470 MMK. Therefore, an individual in Rakhine would need to earn at least 47,470 MMK per month solely to afford sufficient rice.

UNDP’s People’s Pulse survey for 2023, conducted between June and October 2023, estimated a monthly per capita income of 66,600 MMK. With the restrictions currently in place, which followed the onset of Operation 1027 in October 2023, assuming that household incomes were reduced by at least 30% due to the severe setbacks to both agro-based and manufacturing livelihoods described earlier, the per capita income would be 46,620 MMK, barely enough to cover the cost of rice. According to PP 2023 data, this income reduction would result in 56.6% (around 1.4 million) of households having a per capita income insufficient to afford rice alone.

Figure 6. Household budget (source: Inter-agency cash working group)

Expenditure Sector	Monthly exp (MMK)	MEB Share	NFI Share
Food	314,784	65%	
Non-food items	166,012	35%	
Rent + Shelter	14,027	3%	9%
WASH/ Water	11,078	2%	7%
NFI Regular	18,806	4%	12%
Utilities	12,096	3%	8%
Fuel/Energy	27,010	6%	17%
Transportation	24,779	5%	16%
Communication	15,341	3%	11%
NFI Infrequent	9,649	2%	4%
Health	17,046	4%	11%
Education	16,180	3%	5%
Total (MEB)	480,796		

¹⁰ Minimum Expenditure Basket (MEB) Household Expenditure, by Inter-agency cash working group - Multi-Purpose Cash (MPC), Myanmar Strategic and Operational Guidance, July 2024.

¹¹ United States Department of Agriculture: Foreign Agricultural Service (2022) Grain and Feed Annual.

Figure 7. Breakdown of food items (Ibid.)

Food group	Food item	Cost per HH per month 2024	Cost within the basket
Cereals	Rice Ngasein	74,844	23.8%
Fish and other seafood	Fish Paste	4,778	1.5%
Fish and other seafood	Dried Bummalo	19,611	6.2%
Meat, eggs	Pork	11,841	3.8%
Meat, eggs	Chicken	10,141	3.2%
Meat, eggs	Chicken eggs	5,037	1.6%
Oils and fats	Palm oil	21,560	6.8%
Pulses, beans, nuts, and seeds	Gram	7,479	2.4%
Vegetables	Tomato	8,089	2.6%
Vegetables	Onion	12,050	3.8%
Fruits	Banana	4,936	1.6%
Other food items	Pulses, veggies, meat, and dairy	134,418	42.7%
Total		314,784	100%

VII A call for urgent action

By mid-2025, it is predicted that 95% of Rakhine’s population will fall into poverty, with no realistic prospects of economic recovery in the near term¹². With no trade, no functioning productive sectors, and a population in survival mode, practically isolated from the rest of the country and its neighbours, the complete collapse of the economy seems inevitable. The collapse of the economy would further deteriorate an already fragile social fabric.

This outcome risks deepening tensions and insecurity, with repercussions for neighbouring countries. The blockade on trade and essential items would likely incentivize illicit trafficking, including human trafficking, and further destabilize the security situation. While the international community—different actors to varying degrees—has shown interest in resolving the Rohingya crisis over the past few years, the lack of concrete action at this point could foster conditions for another uncontrolled flow of people into neighbouring countries, particularly Bangladesh.

Furthermore, the humanitarian response owing to the many restrictions, is largely based on cash interventions. It therefore is essential to sustain the flow and markets of basic goods, which would allow beneficiaries to access markets and have an immediate and medium-term impact from a livelihood perspective.

To avoid the most catastrophic scenario, the international community should act and deepen its response in Rakhine, leveraging its presence and capabilities:

¹² UNDP Poverty Projections for Rakhine (2024).

- Goods must be allowed to enter Rakhine. All current restrictions within Myanmar should be lifted, and all parties should ensure commercial goods can flow in and out of Rakhine. Furthermore, opening the Bangladesh border for business-to-business channels directly with Rakhine could provide immediate supplies to local markets. The same applies to the Indian border, which is currently an unpredictable channel for items, including rice seeds and fuel, that support economic activities in central Rakhine.
- Aid to meet urgent critical needs and restore basic livelihoods must be provided without interference from any party to the conflict.
- Unimpeded access and safety for aid workers should be guaranteed by all parties.
- Sufficient financial resources to support recovery needs should be made available urgently to allow operations to scale up. These funds could, inter alia, support the provision of livelihood and recovery items for distribution to vulnerable households ensuring food production and incomes increase. Support for transporters and the free flow of commodities could ensure items can reach key locations that would allow market interconnectivity to resume. Credit could be provided to communities using revolving funds and if possible, to micro and small enterprises. Cash for work activities could support the rebuilding of small infrastructures providing income opportunities to displaced populations and support to local communities.
- Recovery support should be provided in parallel to urgent life-saving support.

These measures are needed to meet the minimum requirements to avoid famine in the near term.

Only a comprehensive political settlement of the Myanmar crisis will eventually address the structural issues underlying the Rakhine crisis, as well as those affecting the rest of the country. However, to avoid a severe famine – and therefore a crisis within a crisis – likely triggering more serious regional consequences, the international community must respond urgently.

