

# Affordable Inputs Program

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Fertilizer Association of Malawi Final Report

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## Affordable Inputs Program (2021-22) Executive Summary

The agricultural season of 2021/2022 marked the second implementation of the Affordable Inputs Program (AIP). The Fertilizer Association of Malawi (FAM), with a current membership of 20 companies making up the majority of Malawi's longstanding active private sector fertilizer suppliers, intended to work closely with the Ministry of Agriculture to provide as much information as possible to aid in the smooth implementation of AIP. Unfortunately, this season's AIP faced many challenges, all stemming from changes made in the tender document and implementation of the program which resulted in a massive procurement failure.

The AIP bid invitation was published on the 28th April 2021, and called for both "eligible and qualified" suppliers to bid for the "supply, warehouse and retailing of fertilizer under AIP". Each bidder was required to bid in multiples of 500 MT lots with the minimum bid set at 500 MT while the maximum bid was not stipulated. FAM began engaging the Ministry of Agriculture on the 10th May 2021 by sending a letter regarding the bid document. The issues addressed in the letter included the following:

- The surprise at the proposed AIP Government contribution in the bidding document being reduced from the previous season's amount of MK17,000 to MK15,500 despite the global increase of fertilizer prices (later adjusted to MK19,500).
- The scepticism about the intention of Government to allocate 35% of the awards to suppliers without prior experience which increases the risk of contracting companies that are not able to perform.
- The lack of a requirement of a Performance Bond.
- The lack of a requirement of a Bid Security
- The continued restriction of input types to NPK 23:10:5+6S+1Zn, Urea 46%N and maize seed despite previous recommendations for a broader input selection for other crops beyond just maize.

This year's watered down version of last season's bid document had on one hand increased the number of eligible bidders, however, it simultaneously led to the contracting of suppliers that predictably would not be able to perform or might turn to malpractice in order to seem to perform. Bids were publicly opened the day the bidding period closed on the 27th of May 2021. Contracts were subsequently awarded 4 months months later after much controversy on the 8th of October 2021.

A total of 166 companies were awarded. Out of those awarded, 11 were FAM companies, 153 were SMEs and 2 were parastatals; Agriculture Development and Marketing Corporation (ADMARC) and Smallholder Farmers Fertilizer Revolving Fund of Malawi (SFFRFM). The criteria for the selection of these awardees was unclear as some seasoned suppliers were excluded while suppliers who had failed to perform last year were awarded again. The highest tonnage awarded to a private company was 15,000 MT while the lowest awarded was 500 MT for many of the first time participants. The tonnage awards had to be kept minimal given the large number of awardees which was appropriate for some suppliers, however, there were obvious exceptions that were not based on any understandable reasons.

As was the case in the previous season, supplier's contracts were again unnecessarily restricted to specific Extension Planning Areas (EPAs). If a supplier wished to operate in any other EPAs, they were obliged to apply to the Ministry of Agriculture for permission. ADMARC and SFFRFM were awarded 100,000 MT and 27,000 MT respectively representing 34% of the program.

The implementation details of AIP were officially announced by the Minister of Agriculture, Honourable Lobin Lowe, as late as the 16th September 2021 almost 4 months after the bid invitation was published. Details of the program were shared as follows:

- 1. AIP would aim to supply 3,714,105 million farming households with fertilizer (NPK & Urea) and maize seed. The Ministry would also supply an additional 30,000 farming households with 2 goats equating to 60,000 goats.
- 2. Each beneficiary would receive one 50kg bag of NPK 23:10:5 + 6s + 1Zn, one 50kg bag of Urea 46%N translating to 371,411 MT of fertilizer, and one pack of 5kg hybrid maize seed translating to 18,570 MT of maize seed. The AIP program was seeking the supply of 250,000 MT of fertilizer, indicating that the Government would supply 127,000 MT bringing the total to 377,000 MT.
- 3. Redemption of the inputs would be facilitated through a mobile application developed by the Ministry of Agriculture as was the case in the previous year.
- 4. Each beneficiary would pay a fixed amount of MK7,500 per 50kg bag of NPK and Urea, with the Government contribution set at MK19,500 per 50kg bag of fertilizer. The farmer top up for seed would vary at the discretion of the supplier depending on the type of seed, and the Government would contribute only MK3,365 per pack of seed which was a reduction of 46% from the previous year's contribution of MK6,000.

As per the details above, the total AIP price of fertilizer would be MK27,000 per 50kg bag regardless of the type or geographical region. However, at this point in the season, commercial market prices of fertilizer ranged between MK35,000 and MK38,000. All awarded companies received their contracts only as late as the 31st October 2021 and 108 non-FAM companies had signed. FAM companies had individually communicated to the

Ministry of Agriculture that they had concerns about the AIP price of MK27,000 that members felt needed to be addressed prior to signing the contracts. FAM members had expressed that the AIP price would make it practically impossible for companies to supply genuine fertilizer commercially to the program given the increase in cost and the weakening of the Malawi Kwacha.

In letters sent on 4th June 2021, 30th June 2021, 30th August 2021, 23rd September 2021, and 29th November 2021, FAM communicated the following concerns;

- 1. The shortage of forex and the inability of suppliers to remit US\$ for the purchase of fertilizer.
- 2. The recent increase of international fertilizer prices and logistics costs leading to the market price of fertilizer increasing by 60-80%
- 3. The projected price of fertilizer during the 2021/22 season which was between MK35,000 and MK38,000 per 50kg bag of fertilizer.
- 4. The pressure on the exchange rate due to the scarcity of foreign exchange and the expected depreciation, making the proposed government contribution of MK19,500, coupled with the fixed farmer contribution of MK7,500, insufficient to cover the cost of genuine fertilizer that met the tender specification required.
- 5. The questionable ability of SMEs to supply fertilizer at MK27,000 and the strong possibility of incidences of fraud that would inevitably result.

These issues, and a number of others affecting the program as a whole, were also brought up for discussion in a series of AIP Technical Task Force meetings, the first of which was held on 2nd November 2021. However, there were no resolutions put forward to address these issues. AIP price discussions with the Ministry of Agriculture were not a possibility as the Minister of Agriculture, Hon. Lobin Lowe, explicitly stated that fertilizer suppliers should "take it or leave it" during a Ministerial statement he gave in Parliament on the 18th of November 2021.

As was the case in the previous year, the Technical Task force was convened by the Office of the President and Cabinet. Task force members comprised of all the Principal Secretaries of each Ministry that had a role to play in the program as well as non-Governmental participants of the program. The weekly meetings were chaired by the Secretary to the President and the Cabinet (SPC), Mr Zangazanga D. Chikhosi or the Deputy SPC, Dr Janet L. Banda. The Task Force reported to a Ministerial task force on the same. The following AIP stakeholders were expected to be represented at the Technical Task Force meetings:

- 1. Ministry of Agriculture
- 2. Ministry of Finance
- 3. Ministry of Local Government

- 4. Ministry of Transport
- 5. Ministry of Information
- 6. Ministry of Homeland security
- 7. Ministry of Civic Education & National Unity
- 8. The Fertilizer Association of Malawi (FAM)
- 9. Seed Traders Association of Malawi (STAM)
- 10. National Registration Bureau
- 11. SFFRFM
- 12. Department of E-Government
- 13. Reserve Bank of Malawi
- 14. Malawi Police Service
- 15. Malawi Bureau of Standards

Unfortunately, there seemed to be a significantly lower level of interest and commitment of some members in the Task force meetings, which were instrumental to the success of the program in 2020/21. The majority of the different task force members were often absent unlike in the previous year. Nonetheless, FAM still provided weekly fertilizer stock reports to the Task force detailing FAM's stocks available for AIP in country, in the ports of Beira and Nacala, and on water. FAM also created a AIP supply report that was updated weekly to show the total overall stock available in country specifically allocated to the program. This information was used to keep track of stock levels and determine if there were sufficient stocks to achieve the program target in the time available.

As only 5 FAM companies were finally able to supply limited amounts of old season stock through the AIP contract, there was a considerable amount of fertilizer (approximately 17% of the program requirement) still available from 15 FAM members that the Government could purchase for retail through the parastatals to meet the shortfall in January 2022. Although a stock verification tour of non-contracted FAM warehouses was done on 8th February 2022, it was too late in the program for any procurement to be effected and for the stocks to be acquired.

It must also be emphasized that the reluctance of the Ministry of Agriculture to engage in AIP price discussions, as publically expressed by Honourable Lobin Lowe, was incredibly discouraging to FAM companies who as a whole, import the majority of Malawi's annual fertilizer requirement. As a result, companies ceased to make additional orders for Urea which would normally arrive later in the season and instead, consignments of Urea were diverted to other countries in the region. Due to the lack of engagement by the Ministry of Agriculture, most of the discourse surrounding AIP took place in the media which has a tendency to sensationalize, politicize and misinterpret facts. This public discourse was further inflamed by the often sensational and misleading commentary by the Chair and Vice chair of the Parliamentary Committee on Agriculture and Irrigation who seemed grossly misinformed of the facts and attempted to brand the Association of 20 leading fertilizer companies a "cartel".

On the 16th of October 2021, AIP was officially launched in Chiradzulu by His Excellency the President of the Republic of Malawi Dr. Lazarus Chakwera. In his speech, the President expressed Government's interest in devising a plausible exit strategy for AIP which has since become the key topic of discussion amongst AIP stakeholders.

Following the launch of the program, the first sales of the program were recorded on 2nd November 2021. However, majority of the sales recorded were by the parastatals using stocks acquired in the previous season as suppliers were still finding difficulty in obtaining financing to procure fertilizer, or failing to procure fertilizer at a price that would enable them to sell at the AIP price of MK27,000. Most FAM companies had been able to import fertilizer, however, there was a significant shortage of Urea due to the cessation of Urea imports because the cost of Urea had risen well beyond the AIP price. During a meeting held by the Ministry of Agriculture with awarded suppliers on 4th November 2021 at The Golden Peacock Hotel Conference Room, the new SME awardees expressed that the majority of them had no stock because of difficulty accessing financing and requested the Ministry's support in securing assistance from banks in order to enable them to procure stock. Later in the season, the parastatals had to fill the supply gap by procuring directly from local importers at prices higher than the subsidy price which required the Government to finance a double subsidy. This procurement was done very late in the program to cover an alarming impending shortage and the process was fraught with logistical delays.

On a positive note, this season the performance of the electronic redemption system had greatly improved from the previous season. Improvements made were as follows:

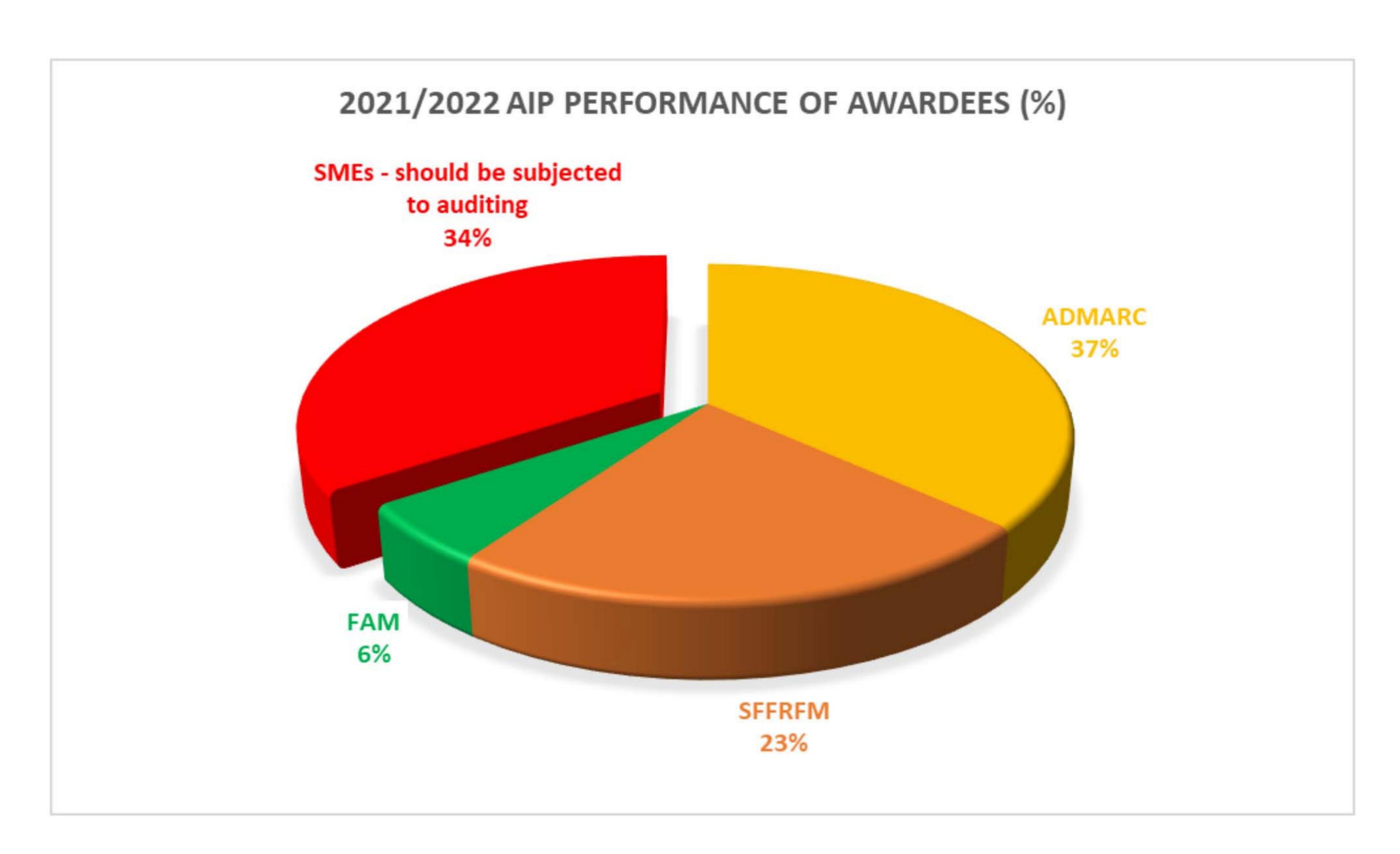
- · Added GSM so that the system could operate without the internet.
- Introduced PostgreSQL Database which is used as the primary data store or data warehouse for many web, mobile, geospatial, and analytics applications. This Database accommodates large amount of data at once which helps to speed up transaction processes.
- The 2021/22 AIP system was operated on a domain that belongs to the AIP electronic system exclusively.
- · The application was given a dedicated server.

On the whole, retailing this season was plagued by:

- · false sales (swiping for cash instead of inputs)
- the sale of adulterated fertilizer
- the lack of fertilizer stocks

All the above can directly be attributed to the poor awarding of inexperienced suppliers many of whom had no fertilizer and no retail outlets, and the price pressure put on private companies by the AIP price that was pegged below the market price of fertilizer. The large number of suppliers on the market also made monitoring a monumental task for the

Ministry of Agriculture and the police. The prevalence of the fraudulent activities put in question the redemption figures recorded by the AIP application as it is speculated that as much as 50% of the fertilizer redeemed represented either adulterated fertilizer or false redemptions. The Ministry of Agriculture carried out an auditing exercise as per recommendation by the AIP task force from the 21st of January to the 10th of March to determine how many companies actually possessed stock and made legitimate sales. If companies failed to provide documentation proving they had legitimately purchased fertilizer, they would either have their future payments cancelled or asked to resupply according to their contracts. The AIP 2020/2021 program officially ended on 14th March 2022, after a period of 5 months. The program claimed to achieve 87% of the program target having recorded sales totalling of 322,856 MT of fertilizer, and reaching 3,228,560 beneficiaries.



Graph 1: (See Appendix 1 Table 1: FAM AIP awards and sales summary, Table 2: Non-FAM AIP awards and sales summary).

Looking ahead to the coming season, FAM has noted that the current messaging from Ministry of Agriculture regarding the private sector participation in AIP continues to be hostile and negative. Further excluding the private sector and displacing it with Parastatals is likely to shrink the sector causing a reduction of jobs in the industry and a reduction in tax contributions gained by Government from these companies. The fertilizer industry is likely to continue to experience price pressure in the next few seasons regardless, so it is imperative that the Ministry of Agriculture is open and transparent about how it implements the program in the future as it is a public program that uses public funds where the objective is to:

assist farmers to purchase inputs

- build the capacity of the fertilizer industry
- create jobs
- generate taxes
- encourage economic growth

FAM aspires to once again play a pivotal role in the program in the following years to come, however, it will be crucial that the Ministry of Agriculture makes a substantial effort to improve the current program implementation design as well as build a positive working relationship with the private sector.

# Detailed Report on the Implementation of the 2021/22 AIP Program

### 1. Tendering and Bidding Process

AIP bid Invitations were published on 28th April 2021 in local newspapers under the procurement reference number of SFFRFM 2020/2021/04. The invitation called for both "eligible and qualified" suppliers to bid to "supply, warehouse and retail fertilizer under AIP". At this point it was expected that the program required a total supply of 400,000 MT tons of fertilizer, of which 200,000 MT was NPK and 200,000 MT was Urea in all EPAs and districts in Malawi. The Ministry of Agriculture announced that it had procured 150,000 MT in the previous season which they would retail through the parastatals in the 2021/2022 season. This reduced the total required from private suppliers down to 250,000 MT. The bidding details were as follows:

- Each bidder was required to bid in multiples of 500 MT lots with the minimum bid set at 500 MT while the maximum was not stipulated. The lots were to be 50% NPK and 50% Urea.
- Suppliers were required to begin supplying the fertilizer within 8 weeks from the date of the contract signing.
- · Bids were valid for a period of 120 days from the bid submission deadline.
- · All bids were to be accompanied by a "Bid Securing Declaration"

FAM sent a letter to the Ministry of Agriculture on 10th May 2021 outlining some concerns with the bid document including:

- The surprise at the proposed AIP Government contribution in the bidding document being reduced from the previous season's amount of MK17,000 to MK15,500 despite the global increase of fertilizer prices (later adjusted to MK19,500).
- The scepticism about the intention to allocate 35% of the awards to suppliers without prior experience which increases the risk of contracting companies that are not able to perform.
- The lack of a requirement of a Performance Bond.
- The lack of a requirement of a Bid Security
- The continued restriction of input types to NPK 23:10:5+6S+1Zn, Urea 46%N and maize seed despite previous recommendations for a broader input selection for other crops beyond just maize.
- Absence of the requirement for bidders to declare presence of physical retail infrastructure.
- No inclusion of details regarding payment terms; no maximum payment period given and no clause for charging interest should payments be delayed.
- The lack of an increased Government contribution specifically for those retailing in the north in order to compensate for higher distribution costs.

The bidding agent, SFFRFM, requested a "Bid Securing Declaration". A "Bid Securing Declaration", as opposed to a "Bid Security", does not require an upfront financial commitment by submission of a bank guarantee or bank certified cheque on behalf of the bidder. This means the financial commitment and capacity of the suppliers cannot be assured and opens up the bidding to many more companies with questionable ability to supply. Companies that are not serious, committed or in some cases not capable to meet the requirements of the bid, submit speculative bids hoping that they may trade them to other capable awardees in the event of an award. This makes the adjudication and awarding process difficult and often results in more capable companies being awarded less and a higher number of awards going to companies that will not perform. This concern was already expressed by FAM in the previous season and unfortunately has not been addressed to date.

Also noted again with concern was the lack of a Performance Bond attached to the contracts. Performance Bonds are an imperative contracting tool used to hold suppliers to a performance target that they would have to achieve by a specific date or else they risk their contract being terminated or reduced and become liable to lose the Performance Bond to the contractor as compensation for non-performance.

It is assumed both the Bid Security and Performance Bond were excluded to encourage new entrants in the fertilizer market to participate in the program, as the bid document explicitly stated that 35% of the awards would be given to bidders with no past experience. The bid document furthermore stated that 20% of the awards would be given to "Indigenous Malawians", while 65% would be awarded to companies with past experience in fertilizer trading.

Additional key requirements from the bid documents included:

- Suppliers were to demonstrate financial capacity by submitting Lines of Credit (LCs) of not less than 100% of the amount being bid for, provided by the bank or the supplier.
- · A certificate of analysis from the fertilizer manufacturer
- A business registration certificate or Certificate of Incorporation
- A valid tax compliance certificate
- Colour copy of the National ID of bidder's directors (This was a new addition to the bidding requirements)

SFFRFM received a total of 469 bids which were publicly opened on 27th May 2021 and the bidding was closed on the same day. Contracts were subsequently awarded 4 months later after much controversy on the 8th of October.

### 2. Contract Awards

A total of 166 companies were awarded, which represented an increase of 95% from the previous season's awards which amounted to 85 companies. Out of those awarded, 11 were FAM companies, 153 were SMEs and 2 were parastatals; ADMARC and SFFRFM. The highest tonnage awarded to the private companies was 15,000 MT, while the lowest awarded was 500 MT for many of the first times participants.

The tonnage awards had to be kept minimal given the large number of awardees which was appropriate for some suppliers, however, there were obvious exceptions that were not based on any understandable reasons. The criteria for the selection of these awardees was unclear as some seasoned suppliers were excluded while 9 suppliers who had failed to perform last year were awarded again. As was the case in the previous season, supplier's contracts were again unnecessarily restricted to specific Extension Planning Areas (EPAs). If a supplier wished to operate in any other EPAs, they were obliged to apply to the Ministry of Agriculture for permission.

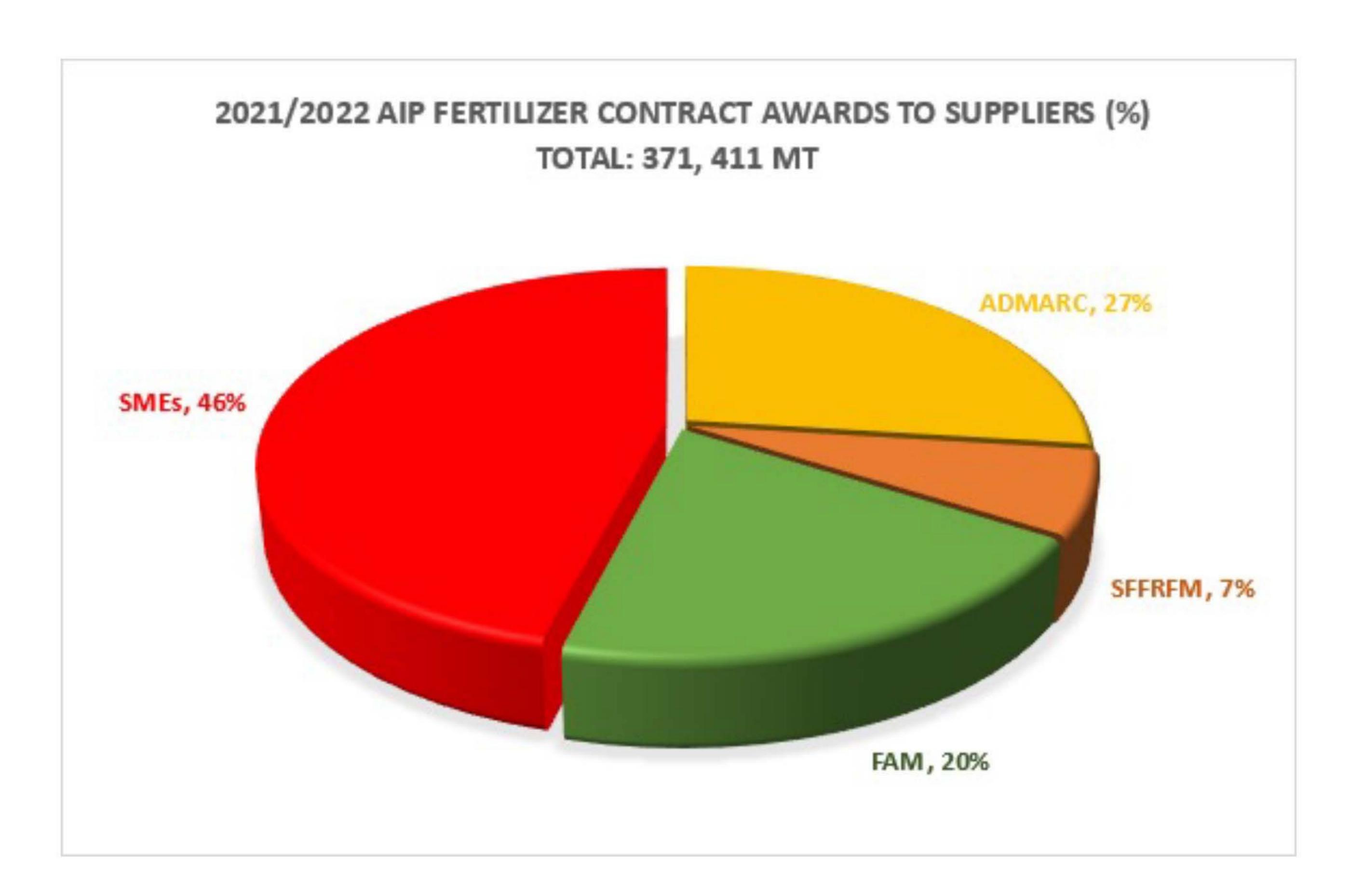
The FAM companies were awarded as follows:

No.	Company	Award (MT)
1	Afriventures Blantyre Ltd	15,000
2	Paramount Commodities	10,000
3	ETG Inputs	10,000
4	Worldwide Wholesalers	7,500
5	Kulima Gold	7,500
6	Rab Processors	7,500
7	Paramount Holdings	7,000
8	Farmers World	4,000
9	Chipiku Stores	3,000
10	Agora Ltd	1,500
11	ATC	1,000
Tota	l tonnage awarded to FAM	74,000
Perc	entage of program target	20%

Table 1

FAM was collectively contracted to supply 74,000 MT (20%) of the program target (which at the time of awarding had been reduced to 371,411 MT). This was despite FAM reporting over 300,000 MT of fertilizer in country available for the program, equating to 80% of the program target. A total of 153 Non-FAM companies were awarded contracts and were to supply 170,411 MT (46%) of the program target.

ADMARC and SFFRFM were initially awarded 100,000 MT and 27,000 MT respectively representing 34% of the program target. Further revisions of the beneficiaries list brought the final target for the program down to 371,411 MT. Therefore, the total fertilizer requirement for the program from the private sector was reduced to 244,411 MT.



Of the 11 awarded FAM companies, 8 companies signed the contracts, and 5 managed to retail under the program. The remaining 6 companies declined to participate due to the increase in international fertilizer prices, which subsequently resulted in the AIP price of MK 27,000 being impractical. This issue was also echoed by awarded SMEs that had to buy from the few local companies that have the capacity to import fertilizer.

Due to fertilizer supply shortages stemming from the price disparity which made supply impractical, ADMARC and SFFRFM were later forced to locally procure and supply an additional 78,400 MT to cover the deficit of fertilizer supply. This fertilizer was procured at the market price which was only possible by providing the parastatals an additional subsidy, or double subsidy, to enable them to retail at MK 27,000. By the end of the program, due to the non-participation of 8 FAM companies, FAM allocated tonnage had decreased to 42,500 MT and they completed 41% of their supply target (17,470 MT) which made up 6% of the fertilizer supplied to the program. Comparatively, non-FAM companies had a final allocation of 201,911 MT and completed 54% of their supply target and supplying 34% of the program's fertilizer.

(See Appendix 1 Table 1: FAM AIP awards and sales summary, Table 2: Non-FAM AIP awards and sales summary).

### 3. Electronic Redemption System

This season, the performance of the electronic redemption system was greatly improved from the last season. There were minimal complaints and few reports of system outages.

Details of the electronic redemption system were given to suppliers at a meeting held by the Ministry of Agriculture on 4th November 2021. Additionally, phone specifications for the app had already been shared in the bid document as follows:

- · The mobile device must be an Android phone
- · The phone should be operating version 9 of the Android operating system
- · 4GD RAM
- · 64GB ROM
- 4G enabled

The Ministry also declared that the following improvements that had been made to the system:

- Added GSM so that the system could operate without the internet.
- Introduced PostgreSQL Database which is used as the primary data store or data warehouse for many web, mobile, geospatial, and analytics applications. This Database accommodates large amount of data at once which helps to speed up transaction processes.
- The AIP system was now to be operated on a domain exclusively for the AIP electronic system.
- The application was given a dedicated server.
- The phones would be linked to the email address of those operating the phones for registration and to allow for easier retrieval of any data that may be lost from the phone. In the previous season, suppliers would have to physically go to the Ministry for lost data retrieval.

Suppliers also had access to daily sales data per outlet through a web portal so they could verify sales by cross-referencing against their own in-house systems to ensure data integrity. This was first requested by FAM in the last season on behalf of FAM suppliers. However, one set back of the new GSM capability was that it enabled suppliers to record transactions after the application was officially closed at 8pm. This was because the 4G feature of the system could be disabled by the system administrators unlike the GSM feature which was controlled by the telecommunications operator and would still be functional after the designated operating hours. Most of the transactions recorded outside of operating hours were suspected to be fraudulent.

As previously expressed in FAMs 2021/2022 AIP report, the benefits of the electronic redemption system cannot be understated. The benefits include:

- The ability for suppliers to view their daily sales and cross check with their own records.
- Faster reconciliation process
- Faster issuing and processing of invoices
- Quicker payment procedure
- Easier monitoring of sales by district and/or EPA allowing the identification of under serviced areas.
- Easier monitoring of sales by company allowing real-time performance analysis of companies.
- Minimisation of corruption by suppliers, beneficiaries and the Ministry of Agriculture administrative staff in various EPAs

Going forward, the system will certainly continue to be an extremely valuable tool for the AIP program in providing much needed transparency to the retail process. The questions raised by FAM in the 2020/2021 AIP report about cyber security and data backup and recovery were not explicitly addressed but we hope that the Department of E-Government and the Ministry of Agriculture have begun to consider implementing these critical requirements. (See Appendix 2, Graph 1: National AIP fertilizer weekly cumulative redemption. Graph 2: Comparison of 2020/21 and 2021/22 weekly cumulative redemption)

### 4. Payments

### a. Malawi Kwacha Payments

The contract for suppliers stated that the Government contribution would be MK19,500 per 50kg bag of fertilizer and this contribution was in addition to the farmer's contribution of MK7,500 per 50kg bag equating to a total of MK27,000.

It should be noted that accepting payment in Malawi Kwacha for the supply of a product that is imported in United States Dollars (US\$) is an additionally risky undertaking for the supplier. If, as has happened on a number of occasions in past fertilizer subsidy programs, the Malawi Kwacha depreciates against the US\$ suppliers are left with purchase commitments that exceed their Malawi Kwacha sales value. If the depreciation happens during the course of the program, it is possible that supply to the market can be disrupted. FAM anticipated both these problems and produced detailed costing models for the Ministry of Agriculture and the Ministry of Finance. These models showed how to calculate the cost of fertilizer per bag delivered to a farmer in US\$, and what would therefore be necessary for the Government to contribute in addition to the farmer contribution which was initially MK4,495 and later increased to MK7,500 per 50kg bag.

The costing models were sent to the aforementioned Ministries on the following dates:

- · 4th June 2021
- · 30th August 2021
- · 23rd September 2021

FAM further illustrated the impact of exchange rate movement on the fertilizer price, and highlighted the risk this introduced to the program and to the suppliers. FAM also included costing models for each month over the period of a year (August 2021 to August 2022), breaking down the cost increase of every item in the cost build up separately and showing which parts of the cost were within the control of the local market. These costing models demonstrated that the planned Government contribution of MK19,500 per bag would not be sufficient to cover the cost of the fertilizer to the supplier, even more so once the exchange rate moved from MK 785: US\$1 to MK 895: US\$1. (See Appendix 3, Document 1: Notes for Fertilizer Cost Build Up - Approximate Spot 20th October, Table 3: Fertilizer Cost Build Up - Approximate Spot 20th October, Table 4: September Cost Breakdown).

The cost of the program was pegged at MK 142 billion and no additional increases were considered by the Government. On 23rd June 2021, a newspaper article reported that the Ministry of Agriculture announced a decrease of beneficiaries from 3,788,105 to 2,740,893 which would have reduced the financial requirement of the program, however, this decision was later reversed by His Excellency the President Dr. Lazarus Chakwera as reported in a newspaper article on 22nd August 2021.

In order to receive payment, suppliers invoiced by providing data from their portal to the Logistics Unit which was tasked with verifying the sales of each supplier against the sales records in the electronic system. Once the sales were confirmed by the Logistics Unit, the invoice would first be submitted to the Ministry of Agriculture, then passed on to SFFRFM as the contracting agent, to issue payments to the relevant suppliers.

Processing of payments began on the 1st December 2021 and continued over the duration of the season. In the final Ministry of Agriculture AIP report submitted to the AIP task force on 8th April 2022, it was reported that 99% of payments to private suppliers were complete while the payments for buffer stock procured by the parastatals was still outstanding. During the period of 23rd January 2022 to 28th January 2022 payments were paused to allow the Government to audit some of the sales due to the fact that numerous incidences of fraud had been reported. The Ministry of Agriculture wanted to ensure suppliers that could not show documents to prove they procured their fertilizer from legitimate sources and it was of certifiable quality would not receive payment. To date, payments equalling MK48.4 billion have been made to suppliers in the AIP program and unfortunately some of these are still in question.

### b. US Dollar Availability

The vast majority of fertilizer is imported into Malawi with only a small portion being blended or granulated in Malawa, and blending and granulation still depend on

predominantly imported fertilizer raw materials. Therefore, companies that import the fertilizer have to be able to pay international suplliers by remitting US dollars. This requires The Reserve Bank of Malawi (RBM) and the commercial banking system to have enough forex on hand to enable companies to maintain their remittance requirements which allows them to make additional orders to keep the fertilizer supply going.

FAM sent a letter to both the Ministry of Finance and RBM prior to the start of the season on 30th June 2021 as the availability of forex is always a key factor in the supply of fertilizer. At the time, given the exchange rate of MK 814: US\$ 1 and the private sector target of 250,000 MT of fertilizer for 2.5 million beneficiaries, the dollar cost of 2021/2022 AIP to the private sector for fertilizer was calculated to reach US\$ 185 million. Aware that these US\$ would be needed between October and the end of January when US\$ are generally in high demand, there was a need for suppliers to appreciate how the Ministry of Finance and RBM would manage this challenge. A meeting was requested to discuss:

- How dollars would be made available to commercial banks for fertilizer importation
- · What plans were in place to make US\$ available to commercial banks for commercial suppliers to settle outstanding remittances.

Outstanding remittances are payments that are due to international suppliers and that needed to be cleared prior to making additional orders of fertilizer for the program. Therefore, the inability to settle them impacts the inflow of fertilizer into the country. Unfortunately, a meeting was never granted to FAM.

This year, suppliers were all encouraged to establish Letters of Credit in order to mitigate the surge in requirement for remittable US\$ and help in managing the supply of US\$ to cater for fertilizer imports. This was one of the financial tools discussed in meetings between FAM and RBM in the prior season. However, as scarcity of forex continues and the exchange rate increases, fertilizer suppliers risk having their commercial viability, confidence and ability to perform in the coming subsidy seasons negatively impacted. Given the sizeable US\$ requirement of the AIP program, it is important for Government to assist suppliers with forex so they are able to adhere to their remittance commitments so as to not be subjected to interest and other late payment penalties from international suppliers.

In the previous season, there was a fear expressed by the private sector that parastatals would be given preference in receiving large awards and in the allocation of foreign exchange in the future as parastatals are less commercial in their outlook, therefore, they are less likely to complain when buying in US\$ and selling in Malawi Kwacha at a loss. There was also a fear that Government will begin to make alternative purchases for the program from selected suppliers in US\$ denominated contracts. Due to the unwarranted price pressure put on the private sector this year, it seems these fears were justified as the parastatals procured buffer stocks of fertilizer to compensate for the limited supply by the private sector. Furthermore, it was announced on 18th February 2022 during the budget speech by the Minister of Finance, Honourable Sosten Gwengwe, that

Government would be buying fertilizer directly from manufacturers with the intention of lowering the overall cost of the program in the 2022/2023 season. This was later confirmed during a meeting between the Principal Secretary of the Ministry of Agriculture, Mr Sandram Maweru, and Parliamentary Committee of Agriculture and Irrigation on 1st March 2022. Mr Maweru stated that Government intends to directly procure either all or the bulk of the fertilizer requirement for the program from Saudi Arabia effectively eliminating all or the majority of the private sector from the AIP supply chain.

However, it must be noted that the Government would be subject to the same cost mechanisms and forex requirements any private company is subject to. Therefore, this approach would only succeed in pushing the private sector out of the program and not necessarily reduce the cost of the program. The private sector not only helps to increase levels of employment, invests in the development of the industry's infrastructure, but also contributes significantly to the nation's tax revenue. For those reasons, it should be in the Government's interest that the national fertilizer industry allows both privately owned and Government owned companies to participate in AIP and operate on a competitive and level playing field.

### 5. Retail

The supplier contract stipulated that suppliers were expected to begin retailing within 8 weeks of signing their contracts. This window was reduced from last year's window of 12 weeks. Considering contracts were awarded in early October this meant that contracted suppliers had to start delivering by the end of November or the first week of December. Following the launch of the program on 16th October 2021, the first sales of the program were recorded on 2nd November 2021.

Majority of the first few weeks' sales recorded were by the parastatals as SMEs were either finding difficulty in obtaining financing from banks to procure fertilizer, or failing to procure fertilizer at a price that would enable them to sell at the AIP price of MK 27,000 per 50kg bag. SMEs struggled to obtain financing because banks had expressed a lack of trust in SMEs due to some defaulting on payments in the previous year, and others not having any collateral for their loans aside from the AIP contract. Another hindrance to retail commencement this season was the reluctance of suppliers, who had stock, to participate. Companies expressed the inability to effectively supply at the given price and as a result some did not retail for the program at all.

The subsidy program was also affected by a notable shortage of Urea due to low participation of suppliers and the drastic increase in international prices of Urea. Subsequently, the Government issued a letter to suppliers instructing them to allow beneficiaries to redeem 2 bags of NPK. Furthermore, the imbalance of the distribution of fertilizer during the program also resulted in Government allowing beneficiaries to redeem 2 bags of Urea where NPK was not available. Other issues that had delayed the start of retailing in the 2020/2021 such as provision of incorrect phone specifications for

for the app, slow registration of devices, and slow transaction times were largely resolved in this season.

As in the previous season, all suppliers were provided with a "Code of Conduct" that was to be adhered to during the retailing process. Companies were also being monitored by District agriculture officers, the police, members of the AIP coordinating unit and local government officials. As was the case in the previous season, supplier's contracts were again unnecessarily restricted to specific Extension Planning Areas (EPAs). If a supplier wished to operate in any other EPAs, they were obliged to apply to the Ministry of Agriculture for permission. However, the Ministry emphasized the need for suppliers to not neglect the rural areas.

Unfortunately, as acknowledged by the Ministry of Agriculture in various media articles, this season was plagued by higher incidences of fraud and adulterated fertilizer. In a letter sent to The Ministry of Agriculture on 29th November 2021, FAM expressed that it was beyond understanding that companies were able to supply at the price of MK27,000 so late in the agricultural season. Any stock carried over from the last season held by suppliers would have been depleted by cash sales in the period of April to September 2021. FAM encouraged the need for companies with active devices on the AIP system to be audited to verify stocks, source and quality thereof. FAM also suggested that more details be included in the proof of redemption on the AIP app in order to attain transparency and auditability in the program. FAM also reported to the AIP Task force that some SMEs had purchased fertilizer from our member companies and subsequently sold the same fertilizer at a lower price.

The Ministry of Agriculture confirmed via a Nation Newspaper article on the 29th of November 2021 that there were numerous reports submitted of suppliers swiping IDs for cash and of other suppliers selling adulterated fertilizer. The Ministry released a press release on 21st December 2021 stating that incidences of the sale of fake fertilizer had been discovered and the perpetrators punished. In addition, any reports received through the AIP toll free line would be thoroughly investigated, and those under the subsidy program would be closely monitored by the Ministry and the Malawi Bureau of Standards (MBS). Additional investigations were also being carried out by the Anti-Corruption Bureau (ACB) which declared that they opened a minimum of 30 fraud cases related to the AIP program. On 27th December 2021, the Minister of Agriculture, Hon. Lobin Lowe, gave a press conference in which he stated AIP had been riddled with counterfeit fertilizer and that as of that date, only 60 suppliers out of 166 had entered the market.

The Ministry of Agriculture carried out an auditing exercise, as per recommendation by the AIP task force, of the suppliers under AIP beginning on the 21st of January 2022. Suppliers were required to provide documentation that verified source and authenticity of their fertilizer stock by 10th March 2022. The documentation included:

- Import Permit from The Ministry of Trade
- The Certificate of Analysis

- Invoice from international supplier
- MBS and MRA clearance documents
- · Proof of financing (Letter of Credit or loan)

In cases where suppliers had purchased their fertilizer from another local importer, they were required to have proof of purchase and a copy of the certificate of analysis as provided by the importer. Suppliers found to not have any legitimate documentation were requested to resupply fertilizer at their own cost or have any pending payments cancelled. On 2nd March 2022, the Ministry of Agriculture issued a public letter warning suppliers against swiping ID cards in return for cash instead of inputs. The Ministry reiterated that those that had not provided documentation to verify their stocks by the 10th of March 2022 would not receive any payments. As of 22nd April 2022, the total quantity of fertilizer that was reported to be fake or non-existent by the Ministry of Agriculture's audit exercise was 500 MT. It is however doubtful that the Ministry of Agriculture will have the capacity and will to conduct a tougher and meaningful audit. There is a risk of billions of Kwacha being paid out to fraudsters.

On the whole, retailing through the private sector this season was plagued with a myriad of issues that can mostly be attributed to the pressure put on private companies by the AIP price that was pegged below the market price of fertilizer. The parastatals had to fill the gap in supply by procuring directly from suppliers and retailing through their own networks. However, this was done fairly late in the program and the process was fraught with logistical delays. In an article published in the Nation Newspaper on 30th March 2022, various Traditional Authorities expressed to The State President, Dr Lazarus Chakwera, that many beneficiaries in their villages were unable to redeem inputs as they either arrived late or the ADMARC depots were constantly out of stock.

### 6. Fertilizer Association of Malawi role in AIP

This year FAM's role was considerably restricted in the 2021/2022 AIP program given the lack of engagement by the Ministry of Agriculture. However, as before, FAM aimed to represent not only suppliers concerns but also providing constructive input on other program issues brought up during the AIP Task Force meetings that took place, the first of which was held on 2nd November 2021.

As a member of the AIP Task Force, FAM offered its experience on a range of issues including fertilizer sourcing, contracting, and good practices in retailing. Unfortunately, there seemed to be a general lack of interest in the Task Force meetings, which had been incredibly critical to the success of the program in 2020/2021. Most of the different Task Force members were often absent unlike in the previous year. This resulted in most of the issues presented by FAM at the meetings remaining unresolved.

During the 2020/2021 AIP season, FAM wished to encourage transparency by sharing information via formal communication about past experiences with the FISP subsidy program that could provide lessons for the implementation of AIP. In the 2021/2022 season, FAM focused on bringing attention to the issue of price which the Association knew would have a huge impact on the program implementation.

The global increase of fertilizer prices did not reflect on the local market until June 2021 when new stock was imported, however, FAM had noted the trend as early as May 2021. FAM sent a total of 6 clear and concise letters to the Ministry of Agriculture and other stakeholders on the following dates:

- · 4th June 2021
- · 30th June 2021
- 30th August 2021
- · 23rd September 2021
- · 29th November 2021

In these letters, FAM communicated the following concerns;

- 1. The shortage of forex and the inability of suppliers to remit US\$ for the purchase of fertilizer.
- 2. The recent increase of international fertilizer prices and logistics costs leading to the market price of fertilizer increasing by 60-80%
- 3. The projected price of fertilizer during the season which was between MK 30,000 and MK 33,000 per 50kg bag of fertilizer.
- 4. The pressure on the exchange rate due to the scarcity of foreign exchange and the expected depreciation, making the proposed government contribution of MK 19,500, coupled with the MK 7,500 farmer contribution, insufficient to cover the cost of fertilizer to be supplied.
- 5. The questionable ability of SMEs to supply fertilizer at the AIP price and the possibility of more incidences of fraud.

The letters were accompanied with the following attachments:

- 1. Detailed fertilizer costings and accompanying graphs (covering the period August 2021 to October 2021) to explain the pricing of fertilizer in Malawi.
- 2. Exchange rate movement graphs
- 3. Exchange rate sensitivity tables
- 4. National price averages

These letters did not get any official response from the Ministry of Agriculture. These issues were also brought up for discussion in the Task Force meetings, however, there were few or no resolutions put forward for these issues.

It must also be stated that the reluctance of the Ministry of Agriculture to not engage in AIP price discussions, or any discussions at all concerning the AIP program, was incredibly discouraging to FAM companies who as a whole import majority of Malawi's annual fertilizer requirement.

Understandably due to the fertilizer price increases, the AIP price attracted a great deal of media attention and interest from general public, as well as various stakeholders in the agricultural industry including Africa Fertilizer Agriculture Partnerships (AFAP), The

International Food Policy Research Institute (IFPRI) and The MwAPATA Institute who authored the following papers addressing the global fertilizer price increase:

- "Why are fertilizer prices high in Malawi and what can be done" Written by Jan Duchoslav and Joseph Rusike for IFPRI and AFAP.
- "The Inorganic Fertilizer Price Surge in 2021: Key Drivers and Policy Options" Written by Christone J. Nyondo et al for the MwAPATA Institute

On 16th September 2021, FAM attended a Roundtable event titled "The Key Drivers of the Fertilizer Price Surge and Policy Options" held by the MwAPATA Institute. This event was the only forum in which FAM had an opportunity to discuss the price issues with some representatives from Government and the Parliamentary Committee although the Minister of Agriculture, Principal Secretary of the Ministry of Agriculture and the Chair and Vice chair of the Parliamentary Committee on Agriculture and Irrigation were all notably absent.

Due to this public interest, and the lack of engagement of FAM by Government, much of the discourse surrounding AIP took place in the media which at times has a tendency to sensationalize, politicize and misinterpret facts. This public discourse, which was mostly negative, was further inflamed by the often sensational and misleading commentary by the Chair and Vice chair of the Parliamentary Committee on Agriculture and Irrigation.

FAM was first engaged by the Parliamentary Committee on Agriculture and Irrigation on 10th August 2021 when the Committee invited 5 members of FAM to attend a meeting on the 17th of August 2021, where the fertilizer price increases were to be discussed. The FAM members shared information explaining the reasons behind the fertilizer price increases, the real global market prices as published by Argus Media which provides price indexes, business intelligence and market data for the global energy and commodities markets, and how they translate to the prices on the Malawian market as demonstrated by a detailed cost breakdown.

The Committee expressed their dissatisfaction with FAMs presentation and recommended a tour of FAM member company shops and warehouses for all 20 members of the Committee. FAM was unable to fund the tour and was subsequently increasingly subjected to hostile commentary by the Committee Chairman, honourable Sameer Suleiman (MP), in media interviews. In a speech given by the Committee Chairman in Parliament on 3rd December 2021, he declared false statements about FAM as well as claiming that the Association is a "cartel" and deliberately inflates fertilizer prices. As a response, FAM released an open letter on 4th December 2021 in an effort to clarify FAMs position and its operations.

Over the years, FAM members have been consistently the highest performers in the subsidy program as was proven last year with 15 FAM member companies supplying 56% of the 345,710 MT delivered to beneficiaries. However, this year only 11 of the 20 FAM

member companies were awarded and just 5 of those supplied to the program delivering 17, 467 MT (5%) of the 322,857 MT redeemed by beneficiaries. Looking ahead to the coming season, FAM has noted that the current messaging from the Ministry of Agriculture regarding the private sector participation in AIP continues to be hostile and negative. Coupled with the price pressure that the fertilizer industry is likely to continue to experience in the next few seasons, excluding the private sector is likely to shrink the sector causing a reduction of jobs in the industry and a reduction in tax contributions gained by Government from these companies. FAM aspires to once again play a pivotal role in the AIP program in the following years to come, however, it will be essential for the Ministry of Agriculture to make a substantial effort to improve the current working relationship between the 2 sectors.

### 7. Expected Impact

This year's subsidy program target was 371,411 MT and a total of 322,856 MT (87%) was supplied. This figure is 7% less than the quantity of fertilizer supplied in the 2020/2021 AIP program. This figure is correct if assumed that all the 109,778 MT supplied by the SMEs was indeed supplied. This number is expected to be significantly discounted after a thorough Ministry of Agriculture audit. The target for the 2020/2021 subsidy program was 3,788,105 beneficiaries and supplied a total of 345,710 MT of fertilizer. As reported by The Ministry of Agriculture crop production data, the national yield for the 2020/2021 season was 4,784,788 MT of maize. (See Appendix 4, Table 5: Historical fertilizer subsidy program target and supply data, Table 6: Historical fertilizer subsidy program crop production).

This year's national yield will be significantly impacted by a late start, short execution window, wide spread alduteration of fertilizers, swiping for cash, fraud, and overall less fertilizer being applied to the crops (NPK and especially Urea), and late rains which resulted in scorched crops in the southern region as they were planted too early. In addition to this crops in the parts of the Central and Southern Region were also destroyed by the 2 tropical storms, Cyclone Ana and Cyclone Gombe, which swept through Malawi in January and March 2022 respectively. The agricultural impact of Cyclone Gombe to crop production is yet to be determined. From the Ministry of Agriculture's Round 1 of crop estimates show a 14% reduction in this year's national yield equating to 4,114,917 MT of maize. However, the Famine Early Warning Systems Network (FEWSNET) Food Security Outlook Report for February to September 2022 is projecting reductions in yield as high as 25%.

### 8. Recommendations

This was AIP's second year of implementation and there was an obvious disparity between the program implementation last year and this year. Given the increase in cases of fraud being reported and numerous complaints of stock outs or late delivery leaving beneficiaries unable to access the required fertilizer, it is clear the program had significant shortfalls this year. FAM has some recommendations based on the past 2 years' experience that would significantly turn the tide for the 2022/2023 season.

### a. Ideal timeline

This year, once again, the AIP program had a very short time frame in which to import, distribute and retail fertilizer (See Appendix 5, Table 7: Affordable Inputs Program Timeline). A longer retailing window, ideally from September 1st to February 29th the following year, would immediately reduce:

- Congestion
- Fraud
- Swiping for cash
- Fertilizer adulteration

A longer retailing window would also give farmers a sufficient time period to access these inputs from a supplier of their choice. This longer window combined with the availability of multiple suppliers at the various redemption points will force suppliers to compete on:

- Quality of the product
- Brand reputation
- Good service
- Competitive pricing

In order to achieve this however and to allow for a less frantic preparation period for suppliers, tendering and awards should be conducted between April and May. Suppliers would have longer time frames to plan their logistics and to obtain financing tools (LC's, loans, etc) that allow a longer period for importation and remittances to be made.

This season, although the tender process began in April, awards were only published on the 8th of October 2022, leaving a period of 6 months in which suppliers were left to speculate about their participation and what quantities of fertilizer should be ordered. Therefore, an early start would increase the program efficiency at all levels as well as increase the impact of the program on farmers.

### b. Pricing of fertilizer

As with fertilizer subsidy programs in the past there was and will continue to be a debate on whether the farmer contribution should be a fixed or variable top up. There are benefits to both approaches.

A fixed top up as applied in the 2020/2021 AIP program ensures all farmers are treated equally across the country, however this approach can become complicated in the context of a floating exchange rate and at times can be so affected that either the Government must increase its contribution leading to an over spending of the national budget or risk a disruption in supply. In a year of exchange rate volatility, the fixed top up approach can lead to critical supply disruptions to the AIP program as demonstrated this season.

The flexible farmer contribution introduces an element of flexibility that works well when coping with a free-floating exchange rate and also serves farmers well as it forces suppliers to compete not only on services but also on price. Under the flexible farmer top up system the Government is certain of its expenditure as it is limited in a fixed amount of Malawi Kwacha per beneficiary. Suppliers also prefer this system as it allows them to adjust prices up or down during the supply period to follow the international cost of fertilizer and the prevailing exchange rate. The system therefore reduces risk for the Government, and the suppliers and ensures farmers receive competitive pricing from suppliers.

Therefore, a flexible top up is good for two reasons; it shields both suppliers and the Government from price volatility and exchange rate risk.

It is a well-known fact that globally fertilizer prices are volatile, and this past year has proven this to be true. The current trend shows that the international prices of fertilizer are to continue to increase. If the government contribution remains fixed and the farmer top up value also remains fixed, the total cost of a 50kg bag of fertilizer could exceed the price a supplier is receiving through the two fixed contributions. This is what happened in the 2021/2022 program and it required the government to increase its contribution however this was not done. A fixed subsidy value (Government contribution) and a variable top up value (farmer's contribution) would allow the top up amount to rise in tandem with the increase in fertilizer prices or increases in rates of exchange. This is approach is also the best at enabling a competitive sales environment that benefits farmers.

It would be a valuable practice for the Government to conduct comprehensive price discovery discussions early on in the program with fertilizer importers in the private sector. This process would take into consideration global fertilizer prices, the exchange rate, and the resulting detailed fertilizer cost breakdowns to determine what the price of fertilizer will be during the subsidy season. This process would be essential in the event of the Government opting for a fixed top up as a variable top up would more easily compensate for any possible changes in the fertilizer prices.

### c. Fertilizer types covered under AIP

It would be incredibly beneficial to farmers for the government to broaden the crops it targets with AIP seed and fertilizer. AIP should also target tradable and exportable cash crops such coffee, tea, bananas, rice and legumes (ground nuts, soya beans, dry beans, cowpeas etc.)

Traditionally farmers in Malawi have been led to believe that fertilization of legumes and tubers is not necessary. Research has demonstrated that that these crops respond well to the right fertilizer formulations and that it is necessary to fertilize these crops if smallholder farmers are to have a chance at becoming efficient producers that can export their crop competitively into international markets. If smallholder farmers were

given the encouragement and opportunity to fertilize these crops FAM believes that Malawi would be exporting a far larger quantity of legumes.

### d. Bid Requirements

It was disappointing to note that bidders and potential suppliers were not strictly required to submit Bid Bond this year. A Bid Bond is an irrevocable bank issued payment instrument provided by the bidder to support the seriousness of his bid and to demonstrate the bidder's commitment to supply against an award. In the 2021/2022 AIP bidding process the suppliers were asked to submit a "Bid Security Declaration" that only needs the signature of a bidder's representative. The disadvantage of this is it allows submissions from bidders that may not have the financial capacity needed to carry out the contract as required. This results in the Ministry being inundated with numerous bids that pose a serious challenge during bid assessment and adjudication.

The lack of financial capacity on the bidder's part increases the likelihood of non-performance and contract defaulting. Bidders that renege on the contract after being awarded could cause the supply and distribution process to be disrupted or delayed, and cause the wasting of Government time and effort.

In addition to the requirement of a "Bid Security", good contracting practice requires a "Performance Bond", the performance bond can be the same instrument as the bid bond of an awardee or a new bond issued by a bank in favour of the Government as a guarantee of the awardee's performance. In the event of non-performance under the contract the Government has the right to encash the Performance Bond as compensation and as a punishment to the failed supplier. The use of "Bid Bonds" and "Performance Bonds" are critical tools to aid the Government in awarding credible and capable suppliers in the first instance as the process weeds out potential defaulters before they are awarded.

Awarding non performing suppliers and speculative suppliers undermines the AIP program and introduces a significant element of risk at many levels in the supply process. The trading of awarded contracts or even of parts of contracts should be guarded against at the awarding and implementation monitoring of AIP.

### e. Contract Awarding

It is important that bidders are meticulously evaluated and the bidders financial and infrastructure capacity to carry out the contract is verifiable. Contracts should only be awarded to those companies with:

- The experience of carrying out similar contracts
- The financial capacity
- The required infrastructure
- · The capability to provide accurate stock movement and sales information
- Adherence to a supplier's code of conduct

There is a Government policy to promote new entrants in the last mile of the supply chain in imports, retail and distribution which is well understood and appreciated by FAM. The process however of identifying and supporting these new entrants with capacity building and financial support/credit is lacking and needed. A coherent strategy and process is necessary if the Ministry of Agriculture would like to succeed in developing a group of new entrants that will go on to grow and become a part of the retail and distribution supply chain on a long term and sustainable basis. The new entrants may begin with smaller contracts, that can be increased as they build their performance and experience. Competent and able companies with a good track record should have no restrictions on tonnages and should be allowed to supply to their maximum capability. Ultimately, awards should only be given to companies with the proven capacity to perform.

Awardees should be allowed to operate in all in all EPAs and districts permitting companies to be able to use the whole of their distribution network and not have some of their shops sitting idle because they are in areas outside the award contract. This approach also negates the temptation of some awardees "selling" EPAs to other awardees.

The awarding process needs to include strong transparent procurement practices accompanied by a well-constructed bid document outlining clear evaluation criteria that take into account the minimum bidder qualifications. The first step in the selection of suppliers is key to ensuring the smooth.

### f. I.T system

It is vital to include security features to the system to protect against attempts of corruption by the beneficiaries. This could be done through emphasizing the need for personal representation of the ID card holder. Sales personnel should be directed to only allow people who can be identified by the image on the ID card to redeem inputs. Additionally, the system could employ the use of biometric features such as a finger print scan to ensure only the ID card holders could redeem the inputs.

### g. Forex Management

In the past years of the subsidy program, forex has always presented as a challenge and knowing this, the Government should make the effort to provide concrete plans to manage this challenge by making use of financial tools to manage the exchange rate and prevent losses by suppliers due to any depreciation of the Malawi Kwacha. Forex availability would be easier to plan for if the program is allocated a longer time period. There would be less pressure on commercial banks and the RBM to provide forex during a period which is traditionally the lean period in terms of forex availability.

Easier access to financial tools such as Letters of Credit and Forward Exchange Rate Contracts that help fertilizer suppliers obtain funding and US\$ availability to support their contracts would enable many more suppliers to perform well, especially suppliers that

are relatively new to the industry and lack the support that bigger suppliers have secured over time. These financial tools also introduce predictability, efficiency and place less pressure on the exchange rate at critical times of the year. They therefore also assist in improving supplier performance lowering the overall Malawi Kwacha cost of the AIP for the farmer and farmer and Government significantly.

### h. Monitoring capacity and Farmer Sensitization

Field monitoring of the AIP supplier operations need to be more systematic and consistent so that where they exist, corrupt practices can be verified at a more technical level by official parties as opposed acting on rumours and conjecture generated by outside parties with a mixture of objectives. This approach will reduce misunderstandings by suppliers and beneficiaries and enable the Ministry of Agriculture to resolve problems on the ground efficiently.

Sensitization is key for ensuring beneficiaries understand how the program operates in this regard. They need to be sensitized on unacceptable conduct such as:

- · Buying fertilizer with another person's ID card
- Double redemption
- Asking for a sales receipt
- ·Reporting any malpractice on the toll-free hotline provided

Farmers also need to be sensitized about how they can check and discover if they are or are not a beneficiary, what their redeemable stocks are at any point in time and the various avenues of assistance available to them when they encounter corruption.

It is essential that farmers are issued an official receipt once they redeemed one or more of the items that they have been given access to under AIP. It is also essential that retailers keep good records that can be audited at any time.

All suppliers should be encouraged to adhere to a code of conduct as all FAM companies do. The ministry could use this code of conduct to evaluate suppliers bidding for AIP contracts, this would ensure that only quality suppliers are contracted.

### i. Smart Subsidy

Calls for the program to be reformed have been expressed often over the years and FAM is of the opinion that there is need to take a critical look at the variables in the program that define the program design and scope, and subsequently transform it to a "smart subsidy" program. Balancing the number of beneficiaries against the quantity and type of inputs supplied and the Government contribution determines the cost of the program and the potential return on investment in:

• Food security: the program has to determine how much it needs to support food security outside the commercial maize market so as to not oversupply the country with maize and subsequently miss the opportunity to support cash crops.

• The National GDP, exports and the economy: Cash crops that can be added to the subsidy program include soya, groundnuts, beans, sweet potato, cassava and pigeon peas. The exportation of these crops is less restricted in comparison to maize which is often restricted because it is a staple crop. Exports of these cash crops would contribute to our forex earnings. Aside from encouraging the production of cash crops, at the same time there needs to be recognition of the key crops that smallholder farmers grow and how they differ from district to district.

Through some careful targeting, the program can be designed to support both. Targeting is a critical function carried out by the Ministry of Agriculture. When the fertilizer beneficiaries are not correctly targeted, vendors step in buy fertilizer from poorly targeted beneficiaries and proceed to sell and resell the inputs on the local market, or export it to surrounding fertilizer markets in Mozambique, Zambia and Zimbabwe. It is important to determine the goal of the program at this stage as this guides who is targeted. Beneficiaries could be divided into 4 categories: FAM believes that it would be beneficial to use the National I.D. database to further segment beneficiaries into:

- 1. Vulnerable: Those that cannot cultivate or produce crops even when given subsidy assistance in order to purchase fertilizer. These beneficiaries would be more suited to support in the form of a cash pay-out or a food package.
- 2. Subsistence: These households have the capacity to cultivate and produce and require assistance to eventually achieve self-subsistence. These households would benefit from 100% subsidy support.
- 3. Semi-subsistence: Semi-subsistence households play a considerable role in production and consumption in developing countries with a great part of consumption by these households is contributed by home production for home consumption. For example, they can be given 50% subsidy support, therefore, their top up for inputs would be higher than the categories above.
- 4. Commercial: These are households that require small intervention or none as they already have the ability to produce enough to be self-subsistent. In this case, partial subsidy support would enable them to become net sellers. For example, they could get 25% subsidy support on inputs for cash crops.

FAM intends to produce a paper shortly detailing the different options available for the redesign of the subsidy program to a smart subsidy. This would prove useful to the Government as it continues to deliberate the value and return on investment the program provides to the country.

### Conclusion

The scale of this program to support Malawi smallholder farmers is unprecedented especially under the strained economic circumstance of the past year. This is the second time in the history of the subsidy program that the Government of Malawi has provided such a huge amount of fertilizer and seed to smallholder farming households. Over the years that the subsidy program has been in existence, the calls for reform have gotten more persistent and more so this year as the fertilizer price increases forced the Government to make tough decisions regarding the implementation design of the program. Going forward, it is imperative that whatever changes are made the program does not lose its transparency and the collaborative spirit between the public and private sector that has been the driving force behind the program's success in the past.

### Appendix 1

### Table 1: FAM AIP awards and sales summary

### AIP OVERALL NATIONAL SALES SUMMARY

AIP program target (MT)	371,411
Total national sales (MT)	322,856
Percentage of AIP program target achieved	87%

Total Fertilizer supplied by FAM members (MT)	17,476
Total Fertilizer supplied by Non-FAM members (MT)	109,778
Total Fertilizer supplied by Parastatals (MT)	195,602

Percentage of AIP supplierd by FAM	6%
Percentage of AIP supplierd by Non-FAM	34%
Percentage of AIP supplierd by Parastatals	60%

### 2021-22 AIP FAM FERTILIZER SUPPLIERS SALES SUMMARY

No.	NAME OF SUPPLIER		ALLOCATION (MT)			TOTAL REDEMPTION (MT)			PERCENTAGE REDEMPTION		
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL	
1	Afriventure BT Ltd	7,500	7,500	15,000	3,359	1,547	4,906	45%	21%	33%	
2	Chipiku Stores	1,500	1,500	3,000	3,150	1,500	4,650	210%	100%	155%	
3	Worldwide Wholesalers Ltd	3,750	3,750	7,500	1,550	2,074	3,625	41%	55%	48%	
4	Paramount Holdings	3,500	3,500	7,000	2,107	46	2,153	60%	1%	31%	
5	Paramount Commodities Ltd	5,000	5,000	10,000	1,832	310	2,142	37%	6%	21%	
6	Agora Ltd	750	750	1,500	=	1986	=0	-	( <del>=</del> 1	<b>—</b> :	
7	Agricultural Trading Co.	500	500	1,000	-	-		-	:=:	-	
8	ETG Inputs	5,000	5,000	10,000	-	::-	-:	-	-	-	
9	Farmers World	2,000	2,000	4,000	-			-	1=1	-	
10	Kulima Gold	3,750	3,750	7,500	-	-	-	-		-	
11	Rab Processors Ltd	3,750	3,750	7,500	-	10=		- 1	2=:	-	
	TOTAL	37,000	37,000	74,000	11,998	5,478	17,476	32%	15%	24%	

### **FAM SALES SUMMARY**

Total National Sales	322,856
	12500 200 10 € 1250 1250

Total Fertilizer supplied by FAM	17,476
----------------------------------	--------

Percentage of	
national sales	6%
supplied by FAM	Com 2017 St 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

### Table 2: Non-FAM AIP awards and sales summary

No.	. NAME OF SUPPLIER	ALLOCATION (MT)			TOTAL	REDEMPTIO	N (MT)	PERCEN'	rage redei	MPTION
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL
1	ADMARC	50,000	50,000	100,000	68,287	52,259	120,546	137%	105%	121%
2	SFFRFM	13,500	13,500	27,000	39,861	35,195	75,056	295%	261%	278%
	TOTAL	63,500	63,500	127,000	108,148	87,454	195,602	170%	138%	154%

### PARASTATALS SALES SUMMARY

Total National Sales	322,856
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Total Fertilizer supplied by Parastatals	195,602
---	---------

Percentage of national	
sales supplied by	<b>61</b> %
Parastatals	

No.	NAME OF SUPPLIER	AL	ALLOCATION (MT)			L REDEMPTIC	ON (MT)	PERCENTAGE REDEMPTION			
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL	
3	Zathu Trading	7,500	7,500	15,000	11,329	12,019	23,348	151%	160%	156%	
4	Eneka Trading	4,000	4,000	8,000	4,863	8,000	12,863	122%	200%	161%	
5	Chipala Investments	3,500	3,500	7,000	3,155	4,251	7,406	90%	121%	106%	
6	Saeed Investments	1,250	1,250	2,500	1,954	4,000	5,954	156%	320%	238%	
7	Mwaladzi Logistics	750	750	1,500	1,560	3,500	5,060	208%	467%	337%	
~	S&E Agro Import & Export Commodities	750	750	1,500	1,500	3,287	4,787	200%	438%	319%	
9	Shaneel & Shanayah Agro Seed Trading	750	750	1,500	1,352	2,715	4,067	180%	362%	271%	
10	Yosa Computer Systems	2,750	2,750	5,500	1,160	2,292	3,453	42%	83%	63%	
11	EIG Trading	500	500	1,000	2,069	1,078	3,147	414%	216%	315%	
12	Pindulani Seed Investments	500	500	1,000	1,152	1,670	2,822	230%	334%	282%	
13	FAWWY Agro Dealers	250	250	500	1,100	1,577	2,677	440%	631%	535%	
14	SBOF Africa Ltd	1,000	1,000	2,000	1,074	1,325	2,398	107%	132%	120%	
15	Benitos Investments	250	250	500	451	1,879	2,329	180%	752%	466%	
16	Keets Gen. Dealers	250	250	500	865	1,301	2,167	346%	521%	433%	
17	Creck Hardware & General Dealers	2,750	2,750	5,500	1,477	636	2,113	54%	23%	38%	
18	Zani Enterprises	250	250	500	840	885	1,725	336%	354%	345%	

No.	NAME OF SUPPLIER	AL	LOCATION (M7	r)	TOTA	L REDEMPTIC	N (MT)	PERCEN	TAGE REDE	MPTION
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL
	Pejo Farm Produce Itsanana Consortium	2,750 750	2,750 750	5,500 1,500	836 498	780 1.037	1,616 1,535	30%	28%	29% 102%
			1,000	2,000	502	1,037 657	1,158	66% 50%	138% 66%	58%
22	Midima Holdings Elvis Supplies & General Dealers Ltd	1,000	1,000	2,000	480	546	1,027	48%	55%	51%
			33763 5 5		10,110,10			30, 9000, 540	100000000000000000000000000000000000000	
$\overline{}$	Fabzy Investments FAME Distributors	250 250	250 250	500 500	548 548	467 467	1,015 1,015	219% 219%	187% 187%	203% 203%
	Agriculture Direct	250	250	500	380	588	967	152%	235%	193%
	MCH Investments Ltd	500	500	1,000	500	459	959	100%	92%	96%
	Debs Agro Dealers	500	500	1,000	423	523	946	85%	105%	95%
	Orbit Investment Mass International	1,000 250	1,000 250	2,000 500	450 196	489 411	939 607	45% 79%	49% 164%	47% 121%
	Minolta Digital Centre	250	250	500	282	313	595	113%	125%	119%
	Lato Wholesale & General	250	250	500	182	364	546	73%	146%	109%
32	Suppliers Agri Inputs & Commodity	1,250	1,250	2,500	258	265	523	21%	21%	21%
	Suppliers Multi-General Dealers	250	250	500	253	257	510	101%	103%	102%
	Allied Engineering	1,000	1,000	2,000	144	361	505	14%	36%	25%
11.555.725.0	Fort Rapid Works	250	250	500	170	332	502	68%	133%	100%
36		250	250	500	236	265	501	94%	106%	100%
	Sawati Stationers Uni General Dealers	250 250	250 250	500 500	250 250	250 250	500 500	100% 100%	100%	100% 100%
	Bearings World	250	250	500	197	303	500	79%	121%	100%
	Private Stock Affiliates Co. Ltd	250	250	500	227	250	477	91%	100%	95%
42	Nantchengwa Investments Hudson Holdings General	250 250	250 250	500 500	177 149	250 250	427 399	71% 60%	100%	85% 80%
	Suppliers Savannah Rush Investments									
	Malipa Interprises	250 250	250 250	500 500	168 99	214 269	382 368	67% 40%	85% 108%	76% 74%
$\overline{}$	Tikhalenawo General Dealers	250	250	500	182	177	359	73%	71%	72%
-	Thengani Enterprise	250	250	500	245	8	254	98%	3%	51%
47	Kachere Investments Fund	250	250	500	250		250	100%	0%	50%
48	E Soko Stationery & Gen. Dealers	250	250	500	133	113	245	53%	45%	49%
	MC Chris & Gen. Dealers  AM Alexander Coomercials	250 250	250 250	500 500	113 146	126 90	238 236	45% 58%	50% 36%	48% 47%
	Paragon M25 and Weddingtons		104.714.0000		255 200		Sella Humania		100.100.00100	
01	Group	250	250	500	86	134	220	34%	54%	44%
	G&S Investments Globalnet Projects & Technical	250	250	500	97	115	212	39%	46%	42%
531	Services	250	250	500	60	148	208	24%	59%	<b>42</b> %
	Cleolive International	250	250	500	90	84	174	36%	34%	35%
$\overline{}$	CB Holdings Co. Ltd	1,000	1,000	2,000	73	94	168	7%	9%	8%
	M1 Distributors Pakesa Gen. Suppliers	250 250	250 250	500 500	68 71	88 69	156 139	27% 28%	35% 28%	31% 28%
	Pitros International	1,000	1,000	2,000	52	87	139	5%	9%	7%
	Satigo General Dealers	250	250	500	60	60	120	24%	24%	24%
	Tamie Investments	250	250	500	45	67	111	18%	27%	22%
	Ceelam Investments Hardware & General World	3,750 250	3,750 250	7,500 500	39 25	62 72	101 96	1% 10%	2% 29%	1% 19%
2.20	Baks Trading	1,500	1,500	3,000	50	40	90	3%	3%	3%
	Masina Investments	500	500	1,000	42	41	82	8%	8%	8%
_	Sheba Enterprise	250	250	500	79	0	79	32%	0%	16%
$\overline{}$	Lee Hort Lamsy General Dealers	750 250	750 250	1,500 500	60 21	15 53	75 74	8% 8%	2% 21%	5% 15%
$\overline{}$	Countrywide Trading	250	250	500	30	36	66	12%	14%	13%
69	Fumbati General Dealers	250	250	500	48	11	58	19%	4%	12%
-	Lonjami Investments	250	250	500	15	40	55	6%	16%	11%
	Hosmate Panganani Trading	250 1,500	250 1,500	3,000	16 24	37 25	52 50	6% 2%	15% 2%	10% 2%
$\overline{}$	Agro Input Suppliers Ltd	250	250	500	22	25 25	48	9%	10%	10%
74	Chatangwa Enterprise	250	250	500	19	26	45	8%	10%	9%
$\overline{}$	LNS Trading	250	250	500	34	10	44	14%	4%	9%
76	Gitech International Premier Trading & General	250	250	500	25	18	44	10%	7%	9%
77	Suppliers Suppliers	250	250	500	21	22	42	8%	9%	8%
78	HA2 General Dealers	250	250	500	30	0	30	12%	0%	6%
	Artish Investments	500	500	1,000	19	-	19	4%	0%	2%
$\overline{}$	Kurgan Investments Thirdstone Trading	750	750	1,500 500	15 7	0	15 12	2%	0%	1% 2%
$\overline{}$	SSM Gen. Enterprises	250 250	250 250	500	3	7	10	3% 1%	2% 3%	2% 2%
	Tamara Investments	250	250	500	3	7	10	1%	3%	2%
	Mighty Women Investments	250	250	500	1	4	5	0%	2%	1%
	Chemical Plus Rose Harris Investments	250 250	250 250	500 500	1	3	4	0% 1%	1% 1%	1% 1%
	O Seas	250	250	500	2	1	2	1%	0%	0%
88	EFG Global Ltd	250	250	500	1	2	2	0%	1%	0%
	Shire Valley Commodities Ltd	250	250	500	0	2	2	0%	1%	0%
	3D'S Trading	250	250	1 000	#C	i e	1.71		-	-
	AH Investments Anna Investments	500 250	500 250	1,000 500	-	:-	1 <del></del>	-	-	-
	AWW Ltd & Serenity Acres Farm	250	250	500	-	-	, <del></del>			<b></b>
94	Bakwena Investments	250	250	500	-	-	-	-	-	<b>H</b> //
	Berna Investments	250	250	500	<b>#</b> 2	-	7 <del></del>	::=	-	<del>;=</del> 0;
$\overline{}$	Bosa Logistics Ltd Byke Investments	250 500	250 500	1,000	-	_		-	-	
	C Thomas Logistics	250	250	500			-	-	-	-
99	Chamachete General Dealers	250	250	500	<b>₩</b>	ræ	-	:=	-	
100	Chikuli Trading	250	250	500	=:		(/ <b>■</b> )	-	-	-0.

No.	NAME OF SUPPLIER	ALL	COCATION (MT)		TOTAL	REDEMPTIO	N (MT)	PERCENTAGE REDEMPTION			
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL	
	Chipembere Holdings Ltd	250	250	500	20		( <del>=</del> )		5₩1	===	
	Cindy Promotional Supplies	250	250	500	-	프	7 <b>2</b> 0	E <del>=</del>	/ <b>≅</b> /		
	Clevic Gen. Suppliers	250	250	500	-	=	120	17 <del>4</del> 4	7=1	==	
	DA Investments	500	500	1,000		77	72	7 <b>2</b>	-	=0	
	Demam Investments	250	250	500	₩.	<u> </u>	-	S <b>=</b>	32	=1	
	Desire General Dealers	500	500	1,000	=	=	-	-	-	=	
	Dynamic Florist	250	250	500	2-1		( <u>=</u>	5 <b>2</b>	F=3	=0	
	Elite Engineering Supplies Ltd	250	250	500	-		•		-	3	
109	Emirald Hardware & General Dealers	250	250	500	-		-		-		
110	Etihad Investment	250	250	500		<u>= 1</u>	<b>3</b>	18		<b>B</b>	
111	Exceeding Grace Investments	2,000	2,000	4,000	8	<del>-</del>			#	<del>(1</del> )	
112	Felicidade Enterprise	1,000	1,000	2,000		<del>-</del>	·		-	<b>(E)</b>	
113	Fox Engineering	1,500	1,500	3,000	=	=	-	J <del>E</del>	-	<b>=</b> 0	
114	General Products Solutions	250	250	500	<del></del>	77	<b>:</b>	(E		<b>13</b> 0	
115	GR&C Investments	250	250	500	=-	= .		(E)		<b>₩</b>	
116	Group in X-llence	250	250	500	E.	-	-	£	-	<b>3</b>	
117	GY Imports & Exports	250	250	500	-	<del></del>		( <del>-</del>		<b>=</b>	
118	Highrise Investments Ltd	250	250	500	<del></del> 5		188	95	ú <del>.</del>		
119	I Investments	250	250	500	-	=		o <del>li</del>		<b>.</b>	
120	Innovation Business Solutions	250	250	500		-			:=:		
121	Invest Pack Solutions	250	250	500		-					
122	J&F Investments	250	250	500	-	-	-		8 <b>=</b> 1	<del>-</del> .	
	JK Investments	250	250	500	-	<del>≡</del> 1	3.E		: <del>-</del>	·==1	
	Judah Investments	250	250	500	-	## E	S <del></del>		i <del>.</del>		
	Kasamba Investments	250	250	500	-	H1	1.5	X <del>-</del>		J#3	
	Kelvam Enterprises	250	250	500		=1	-	_	-	-	
	KK Unique Suppliers	250	250	500	_	=:	-	_	7 <b>-</b>	-	
	Kumakoka Trading Co	250	250	500	_		n=-	-	5=:	-	
	Le Tre Sor Investments	250	250	500	_	_	_	_	1=1	-	
	Mabreen Investments	250	250	500	_		-	7-	3=	-	
	Mackson Evans & Associates	250	250	500	_		-	_		-	
	Market Link & Support	250	250	500	_	=0	-	-	-	-	
17001127011000000	Milanzi Holdings	250	250	500	12.0	<u> </u>		_	38	-	
1212121212	Mizu Innovation	250	250	500				_	3=	_	
No. of Contract of	Mubanga Investments	250	250	500		<u> </u>		91 <u>44</u>	N=P		
	MV Continental Ltd	500	500	1,000		<u>=</u>	_				
	Nellie Technologies	250	250	500							
	O-Light Investments	250	250	500					19		
	Reforms Interprise Agro Dealer	250	250	500		550.0.7	1 <del>-</del>	9990			
	Richie Investments	250	250	500			N-E	1107	7623	1007	
140	Riche mvestments	230	230	300	-			-	1=1		
141	RIS Associates & General Trading	250	250	500		E1	799	0=	920	-	
1/10	S11 Industries	250	250	500	200	842.5	1723	(04)	123	2220	
	Sagar Distributors	250	250	500	- 1 1980	270			:=	200	
		500	500	1,000		<u>= '</u>	-	-			
	Samsai Multimedia & Linde Motel			· ·							
	SGR Holdings Co Ltd	250	250	500	=	# 1 m	-		<b></b>		
	Sinam Enterprise   Ltd	250	250	500	-		-	3.5			
	Southern Commodity Processors	250	250	500	=	1				•	
	TI & TI Investments	250	250	500	-	8.		-			
	Tiachi Gen. Suppliers Tiwale Investments & Gen.	250 250	250 250	500 500		=.	-		-	-	
151	Trading Tsogolani Investments	250	250	500	-	<u>-</u> -0		( <del></del>			
	Wasses Danissas 9 Casas 1	250	250	500	-						
153	Supplies West One	250	250	500	_	-		_	1.50 5.50	-	
	Whitechurch General Dealers	250	250	500	- 1		-	1/2	-	-	
	Willz General Dealers	250	250	500	_		5771	10.55	155a		

No.	NAME OF SUPPLIER	ALLOCATION (MT)		TOTAL REDEMPTION (MT)			PERCENTAGE REDEMPTION			
		NPK	UREA	TOTAL	NPK	UREA	TOTAL	NPK	UREA	TOTAL
	Totals	83,000	83,000	166,000	46,727	63,052	109,778	56%	76%	66%

### NOM-FAM SALES SUMMARY

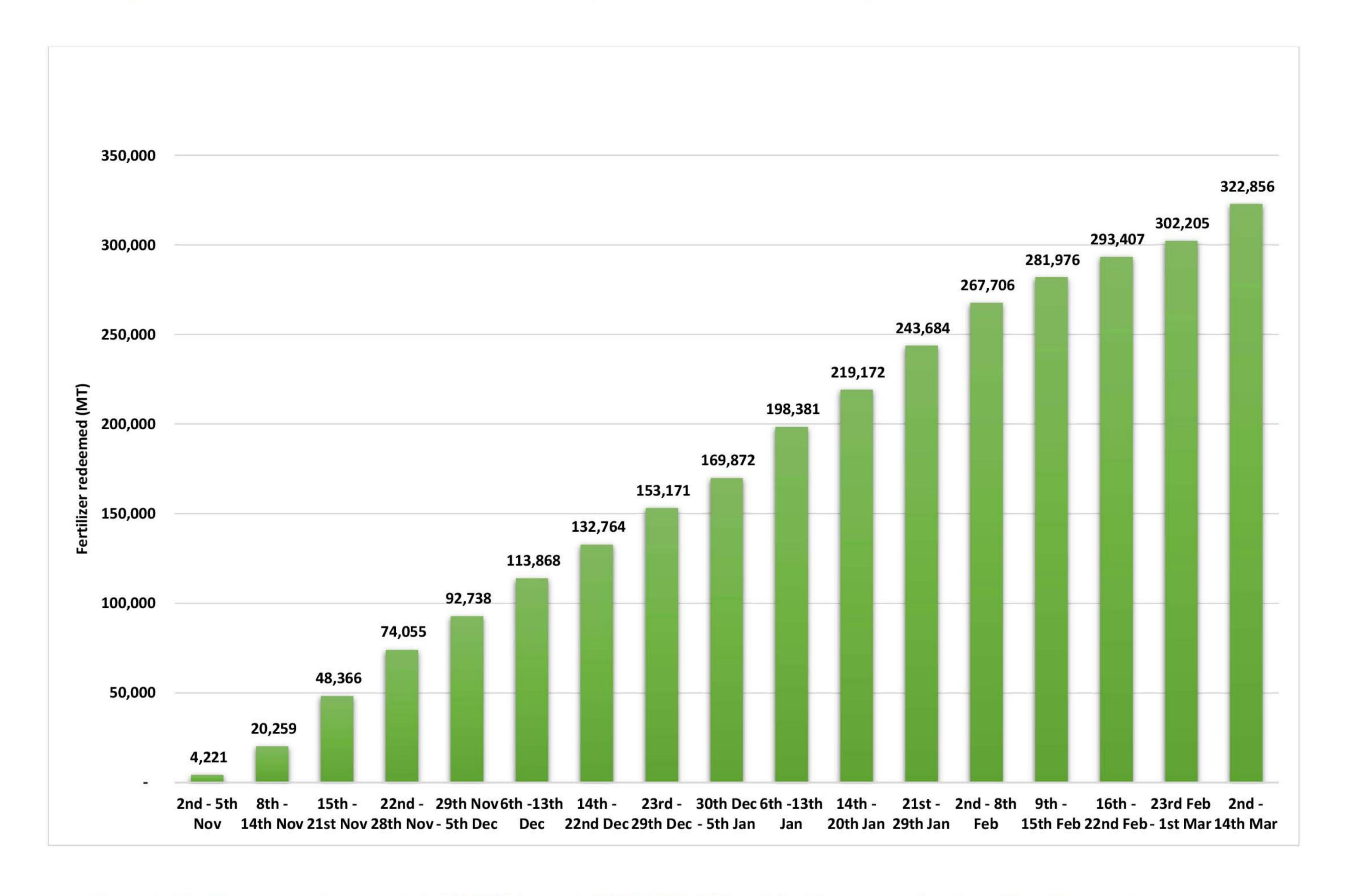
Total National Sales	322,856
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Total Fertilizer supplied by Non-FAM	109,778
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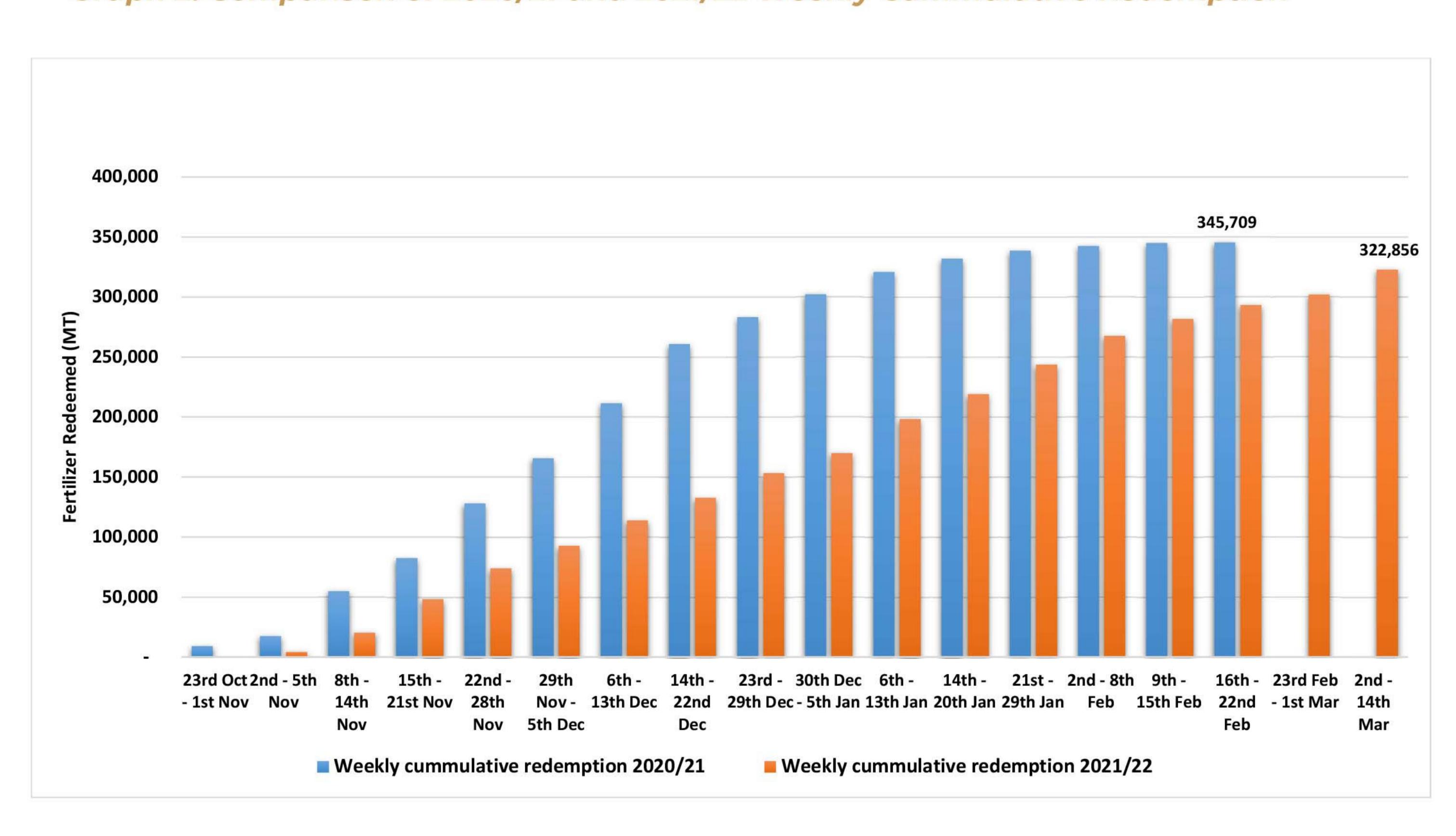
Percentage of national	
sales supplied by Non-	34%
FAM	

Note: Allocations not updated after the addendum

### Graph 1: National AIP fertilizer weekly cumulative redemption 2021/22



Graph 2: Comparison of 2020/21 and 2021/22 Weekly Cummulative Redemption



### Document 1: Notes for Fertilizer Cost Build Up - Approximate Spot as of 20th October

**FOB**: Free on Board. This is the price of the fertilizer at the point of loading from the supplier at a port.

**Freight**: This is the shipping cost of getting the fertilizer from the source country to the port nearest to the destination country. In the case of NPK, the source would be China and the nearest destination port would be Beira or Nacala in Mozambique. In the case of Urea, the source would be North Africa or the Middle East and the nearest destination port would again be the Beira or Nacala port in Mozambique. The rate is higher depending on the distance between source and destination.

CFR: Cost and Freight. This is the sum of the FOB price and Freight cost.

**Ad-valorum (0.017xFOB)**: The tax imposed on bulk shipments into Beira, over and above port handling and clearance fees. This is approximately 1.7% of the FOB price.

**Demurrage:** Demurrage is a charge incurred for delay of the container or vessel within the port, charged by the shipping company or the party that has leased the container. Due to port delays resulting from logistics bottlenecks caused by the Covid 19 pandemic, it is becoming common place for containers to be delayed at ports. For this costing build up it is not included because it may or may not be applicable. Demurrage is also charged when a loaded ship is delayed from birthing or offloading at a port, this can be as high as \$200/day for a container or \$40,000/day for a vessel.

Through Port Bags, Bagging and clearing: Handling charge for getting the fertilizer through the port and bagged if necessary. Urea has to be bagged at the port while NPK often comes bagged, therefore the difference in costs. Clearing charges imposed for transit to Malawi.

**FCA – FOT:** Free Carrier and Free on Truck. This is the cost of transferring the fertilizer from port warehouses and loading on to outsourced trucks.

**Trucking – LLW:** The cost of transporting the fertilizer from the port by truck to a storage warehouse in Blantyre (\$65) Lilongwe (\$75), or Mzuzu (\$110).

**Handling + Storage 30days:** The cost of handling and storage of the fertilizer after delivery to a warehouse for a period of 30 days.

**DDU:** Delivered Duty Unpaid is the cost of the fertilizer at the point of delivery to a customer in Malawi. In this case, the customer would be ADMARC, SFFRFM, or a FAM member company.

**MBS 1.5%:** Malawi Bureau of Standards charges a fee equal to 1% of FOT and a CESS levy (for quality development) which is 0.5% of DDU, resulting in a total fee of approximately 1.5%.

Finance of DDU: This is the cost of facilitating payment to the suppliers for the fertilizer imposed by a bank. As fertilizer is an imported commodity, it has to be paid for in US\$. Through financial facilities like LCs (Letters of Credit) and Forward Contracts, banks enable the customer to purchase from suppliers. The basic requirement is that the customer must have the financial capacity in Malawi Kwacha to cover the equivalent US\$ cost. The cost of this finance is approximately 5.5% of DDU price covering 180 days of credit.

**Redistribution in Malawi (MW)**: The cost of transporting the fertilizer from central warehouses in each region to depots across the districts. This cost is highest in the north because of the longer distance between the entry point of the fertilizer into the country (southern region) and the farthest cities in the northern region, as well as the poor road infrastructure in the north which raises transport tariffs (unless the fertilizer is imported from Dar es Salaam).

**Retailers Gross Margin (GM)**: This is the gross margin the retailer adds in order to cover operational costs including:

- depot storage
- overhead costs
- staff salaries
- trading licenses
- retailing licenses
- security
- salaries for additional temporary staff and administration
- profit margin

It is roughly 10% of the sum of all costs incurred at the point of delivery to a depot.

**Retail Price \$/MT**: This is the US\$ retail price per MT, \$834 for NPK and \$840 for Urea already in country.

**Retail Price MK per 50 kg**: This is the MK retail price per 50kg bag of fertilizer already in country which is MK34,363 for NPK and MK34,621 for Urea.

Therefore, if the farmer contribution is set at MK7,500, this shows that the Government contribution needs to be set at approximately MK26,863 for NPK and MK27,121 for Urea. Total subsidy cost of the program to the Government for 3.7 million beneficiaries is MK199 billion (\$242 million), while total value of the program including the contribution of MK55 billion (\$67 million) by 3.7 million farmers is MK255 billion (\$309 million).

### Table 3: Fertilizer Cost Build Up - Approximate Spot (20th October 2021)

### 824 MK:US\$

Total Cost MK

Cost to Farmer MK

<b>824</b> MK:US\$									
		Fating at a dia Carreton		Esti	imated	Es	timated		
		Estimated in Country		in C	Country	SI	nortfall		
		100%		į	50%		50%		
		NPK 23:10:5		Ure	ea 46N	Uı	ea 46N		
		US\$ /Mt		US	\$ / Mt	U	S\$ / Mt		
Doforon		Market Ouete		^	ranc		Λναιιο		
Referen	ce	Market Quote			Argus		Argus		
<b>Date</b> FOB - Bu	عال	<b>23-08-21</b> 466		25	<b>-07-21</b> 485	14	<b>I-10-21</b> 740		
	IIK.	90			60		60		
Freight			-		545				
CFR		556	-		343	12	800		
Ad-valor	um (0.017xFOB)	7.9			8.2		12.6		
Demurra		0.0			0.0		0.0		
Insurance	_	5			5		5		
Through									
Bags+Ba		34			50		50		
			_						
FCA - FC	T	602.9	-		608.2	ò <del>-</del>	867.6		
Trucking	g - LLW	80			80		80	70-BT 80-LL\	N 100-MZ
Out-	g + Storage 30days	5			5		5		
DDU		687.92	-		693.2		952.6		
1.5% Mbs		10.3	-		10.4		14.3	1% of fob+ 0	.5% landed cost cess
5.5% Finance	of DDU	37.84			38.13		52.39		
Redistril	oution in MW	22.16			22.16		22.16		
10% Retailers	s GM	76			76		104		
Retail Pr	ice \$/MT	834			840		1146		
Retail Pr	ice MK per 50 kg	34,363			34,621		47,197		
MG Con	tribution	26,863			27,121		39,697		
	Contribution	7,500			7,500		7,500	34 492	Average of historic
Total Pr		34,363			34,621		47,197	18	Average of historic plus new Urea
Totalii	icc iviic	34,303			34,021		47,137	30,727	Average of mistoric plus new orea
Check \$	/Mt	\$ 834		\$	840	\$	1,146		
Shortfal	l in MG								
	ition (Historic)	K 7,492.34							
Shortfal		,							
	tion (Historic plus								
new Ure		K 11,727.29							
Benefici	arios		i i						
Benefici	3,700,000								
			A 0 40 40					Vender content of	Precentage
Cost to	MG MK	199,743,334,614						26,992	78%

**55,500,000,000** \$ 67,354,369

**255,243,334,614** \$ 309,761,328

22%

7,500

34,492 Check

### Table 4: September Cost Breakdown

### 822 MK:US\$

	NPK 23:10:5 US\$	Urea 46N	
	/Mt	US\$/Mt	
FOB - Bulk	467	485	<b>Urea October Shipment</b>
Freight	90	60	
CFR	557	545	
Ad-valorum (0.017xFOB)	7.9	8.2	
Demurrage	0.0	0.0	
Insurance	5	5	
Through Port			
Bags+Bagging	34	50	
FCA - FOT	603.9	608.2	
Trucking - BT	80	80	80-BT 90-LLW 110-MZ
Handling + Storage 30day	′s5	5	
DDU	688.94	693.2	
1.5% Mbs 1.5%	10.3	10.4	
5.5% Finance of DDU	37.89	38.13	
Redistribution in MW	20	20	
10% Retailers GM	76	76	
Retail Price \$/MT	833	838	
Retail Price MK per 50 kg	34,231	34,440	
MG Contribution	26,731	26,940	
Farmer Contribution	7,500	7,500	
Total Price MK	34,231	34,440	34,336 Average
Check \$/Mt	833	838	

Benificeries

3,700,000

Cost to MG MK	198,583,204,475.76	\$ 241,585,407
Cost to Farmer MK	55,500,000,000	\$ 67,518,248

Average	Precentage
26,836	78%
7,500	22%

**Total Cost MK 254,083,204,476** \$ 309,103,655

34,336 Check

# Table 5 Historical fertilizer subsidy program target and supply data

Data Source: Ministry of Agriculture, Annual Input Subsidy Reports Published by The Logistics Unit

Year	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Beneficiaries	1,600,000	1,400,000	1,544,400	1,500,000	1,500,000	1,500,000	000'006	000'006	1,000,000	000'006	3,788,070	3,714,110
Government target (MT)	160,000	140,000	154,440	150,000	150,000	150,000	90,000	90,000	100,000	90,000	378,807	371,411
NPK supplied (MT)	79,945	70,035	76,949	74,916	74,987	74,783		44,755		44,944	172,816	166,873
Urea supplied (MT)	80,007	998'69	76,898	74,904	14,827	73,192	44,735	44,625		44,935	172,836	155,983
D compound	87											
CAN	492											
Total supplied (MT)	160,531	139,901	153,847	149,820	149,814	147,975	89,511	89,380	99,681	89,879	345,652	322,856

# Table 6: Historical fertilizer subsidy program crop production

Data Source: Ministry of Agriculture, Annual Input Subsidy Reports Published by The Logistics Unit

									PRODUCTION (MT)	ON (MT)							
MAIN CROPS	No		2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022 Estimates
	1	Maize	2,777,438	3,767,247	3,419,210	3,895,181	2,646,618	3,639,866	3,978,123	2,776,277	2,369,493	3,464,139	2,697,959	3,625,536	3,070,025	4,581,524	3,849,011
Cereals	2	Rice	114,905	135,988	110,106	117,733	110,135	125,156	132,002	111,437	83,757	121,330	111,824	116,227	126,146	155,433	137,591
	3	Sorghum	61,999	60,025	53,932	73,330	67,132	86,242	93,165	79,327	58,192	90,370	82,852	133,212	128,731	118,351	116,197
	4	Groundnuts	260,573	293,948	297,487	325,215	219,182	380,800	381,049	286,878	275,070	386,185	344,583	407,779	1,503,946	402,993	437,636
Legumes	2	Beans	129,948	171,420	152,398	176,760	136,397	189,417	134,334	188,745	157,769	198,486	188,158	208,571	187,603	227,795	221,649
	9	Soya	64,489	860'58	73,356	75,655	48,335	116,977	124,593	120,952	136,910	208,556	175,475	191,380	244,510	264,497	323,386
	7	Cassava	3,539,660	3,874,705	4,000,986	4,316,373	4,047,316	4,813,699	5,102,692	5,012,763	4,996,843	4,960,556	5,410,506	6,608,868	5,591,466	6,101,396	6,085,723
Tubers	8	Sweet Potato	2,362,425	2,695,878	2,897,888	3,223,263	2,849,544	3,846,930	4,209,699	4,324,873	5,122,473	5,472,013	5,668,543	6,385,019	6,133,862	7,448,247	7,282,328
	6	Irish Potato	673,344	775,629	775,650	928,941	824,796	924,969	1,023,981	1,065,833	1,043,338	1,226,603	1,125,874	1,020,508	1,005,958	1,419,527	1,435,152
Commercial	10	Tobacco	160,238	208,154	172,972	174,927	45,702	132,847	138,853	115,584	120,479	82,063	116,557	125,623	94,010	123,682	102,815
	11	Cotton	76,761	72,664	29,165	52,456	196,557	158,826	131,925	79,048	31,439	29,545	21,489	25,095	55,254	21,075	21,618
													250				
OTHER CROPS		Others	52,346	53,215	48,504	56,187	57,857	69,120	73,471	56,070	109,981	672,543	832,532	5,818	8,566	5,872	560,635
			4				A100										
TOTA	TOTAL CROP PRODUCTION		10,274,126	12,193,971	12,031,654	13,416,021	11,249,571	14,484,849	15,523,887	14,217,787	14,505,744	16,912,389	16,776,352	18,853,636	18,150,077	20,870,392	20,573,741

### Table 7: Affordable Inputs Program Timeline

DATE	EVENT
28 <sup>th</sup> April 2021	AIP 2021/2022 bid invitations are published in the Daily
	Times and Nation Newspapers. Total tonnage for the bids
	was 250,000 MT (125,000 NPK, 125,000 Urea)
10 <sup>th</sup> May 2021	FAM letter: AIP 2021/2022 Bidding document concerns.
	FAM engages Ministry of Agriculture by sending a letter
	outlining concerns with the bid document such as price.
27 <sup>th</sup> May 2021	Bid submission ends
27 <sup>th</sup> May 2021	Bids are publically opened at Malawi Sun Hotel and
	Conference Center, Blantyre. Over 500 bids were
	submitted.
28 <sup>th</sup> May 2021	AIP budget of MK142 billion is announced by the
	Honorable Minister of Finance, Felix Mlusu.
4 <sup>th</sup> June 2021	FAM letter: The Impact of Fertilizer and Currency Volatility on Retail Prices.
	FAM sends a letter to the Ministry of Agriculture outlining
	the impact of currency volatility on retail prices with a
	price breakdown table and price movement graphs
	attached.
23 <sup>rd</sup> June 2021	The Daily Times article: Government trims Affordable
	Input Program list.
	Government reduces the AIP beneficiaries list from
	3,788,105 to 2,740,893.
30 <sup>th</sup> June 2021	FAM letter: Forex Availability for the 2021/2022 AIP.
	FAM sends a letter to the Ministry of Agriculture, Finance
	and Reserve Bank of Malawi outlining concerns regarding
	the availability of forex needed to import fertilizer
	required for the program.
26 <sup>th</sup> July 2021	The Nation article: Ministry exploring more AIP financing.
	Ministry of Agriculture announces it is exploring other
	avenues of funding to support beneficiaries removed from
	the program.
10 <sup>th</sup> August 2021	FAM is invited to a meeting with the Parliamentary
	Committee on Agriculture and Irrigation on the 17 <sup>th</sup> of
	August to brief the Committee on issues pertaining to the
	price adjustments of fertilizer in the country.
13 <sup>th</sup> August 2021	The Daily Times article: Rising oil and fertilizer prices worry
	Reserve Bank of Malawi (RBM).
	Concern is expressed by RBM regarding the trend of the
	rising price of imported goods including oil and fertilizer

	which would result in deteriorating terms of trade in the short to medium term.
17 <sup>th</sup> August 2021	The Nation article: Chakwera set to meet fertilizer makers.  The State house spokesperson announces during a briefing that the president plans to meet fertilizer suppliers to discuss win-win solutions to manage the increasing prices of fertilizer.
17 <sup>th</sup> August 2021	FAM meets the Parliamentary Committee on Agriculture and Irrigation to discuss the causes of the increase of fertilizer prices in the country.
18 <sup>th</sup> August 2021	The Nation article: Committee moves to bring down fertilizer prices.  Parliamentary committee states that it cannot force private fertilizer traders to reduce prices but will discuss with Government to find cheaper sources, as well as to empower SFFRFM and ADMARC to supply AIP exclusively.
18 <sup>th</sup> August 2021	The Daily Times article: Parliament faces fertilizer dealers, laments rising prices.  Committee Chairman states they are not convinced rising prices are due to global trends and will engage Government to empower SFFRFM and ADMARC to source cheaper fertilizer.
20 <sup>th</sup> August 2021	The Nation article: MPs, Councilors stop AIP implementation. Lilongwe District legislators and ward councilors protest over the reduction in the number of beneficiaries.
22 <sup>nd</sup> August 2021	The Nation article: Chakwera sustains AIP beneficiaries.  President Lazarus Chakwera reverses the decision to reduce the number of beneficiaries under AIP.
30 <sup>th</sup> August 2021	FAM letter: The recent increase in international and local fertilizer retail prices.  FAM sends a letter regarding the price increase to the Ministry of Agriculture and the Ministry of Trade. This letter includes attachments showing price breakdown, exchange rate movement and movement of various costs related to fertilizer (FOB price, freight cost etc.)
3 <sup>rd</sup> September 2021	Daily Times article: <i>Ministry to engage Treasury on AIP funds</i> .  Hon. Lobin Lowe states that the Ministry of Agriculture is engaging the Ministry of Finance to see how the AIP budget shortfall can be covered to accommodate all beneficiaries.
16 <sup>th</sup> September 2021	Hon. Lobin Lowe gives a press briefing detailing the implementation of the 2021/22 AIP. MK124 billion is allocated to fertilizer purchase for a total of 3,714,105 beneficiaries. Each farmer is entitled to one 50kg bag of NPK, one 50kg bag of Urea and a 5kg pack of maize seed. Government contribution is set at MK19,500, farmer contribution at MK7,500, making the total price per 50kg

	bag of fertilizer MK27,000. It is also strongly stated in the press briefing that Government will not revise the fertilizer prices.
22 <sup>nd</sup> September 2021	The Nation article: Fertilizer price capping questioned.  IFPRI and MwAPATA institute express concern that AIP performance could be compromised because of the Government's decision to cap the fertilizer price below local prices despite the increase in international fertilizer prices.
23 <sup>rd</sup> September 2021 8 <sup>th</sup> October 2021	FAM letter: Government fertilizer price for AIP 2021/2022. FAM sends a letter regarding the Government fertilizer price for AIP 2021/22 to the Hon Minister and PS of the Ministry of Agriculture. The letter references letters sent previously, have a fertilizer cost breakdown attached and also request a meeting with the Ministry to discuss price.  Awardees published in The Daily Times newspaper. A total
	of 164 companies are awarded. The highest award is 15,000MT and the lowest is 500MT.
16 <sup>th</sup> October 2021	AIP 2021/22 launched by His Excellency the President of the Republic of Malawi, Dr. Lazarus M. Chakwera, in Chiradzulu. In his keynote speech, he states the need to change AIP to make it "better and more sustainable".
2 <sup>nd</sup> November 2021	Inaugural meeting of AIP Task Force takes place.  Ministry of Agriculture reports that 108 contracts are signed and sales have begun.
4 <sup>th</sup> November 2021	Ministry of Agriculture holds a meeting with all AIP awardees to discuss challenges from the previous year and possible solutions. Hon. Minister Lobin Lowe once again reiterates that there will be no discussions about price.
18 <sup>th</sup> November 2021	The Daily Times article: 10 AIP suppliers yet to sign contracts.  The Nation article: 13 suppliers Boycott AIP.  Both articles outline the reluctance of private companies to sign AIP contracts and supply at MK27,000, representing a shortfall of 40,000MT.
19 <sup>th</sup> November 2021	The Daily Times article: Government adamant on AIP price.  The Nation article: Take it or leave it, AIP suppliers told.  The articles cover the Hon. Minister of Agriculture's ministerial statement in Parliament made on 18 <sup>th</sup> November 2021 where he expressed that AIP price would not be revised and suppliers should "take it or leave it".
29 <sup>th</sup> November 2021	The Nation article: Vendors raid villages, buy national IDs for AIP.  The Ministry of Agriculture admits to receiving complaints from across the country through its toll-free line that

	some vendors are buying national IDs from beneficiaries to access AIP.
29 <sup>th</sup> November 2021	FAM letter: 2021/2022 AIP Program Concerns.  FAM sends a letter to the Ministry of Agriculture and SFFRFM regarding the inability of most companies to supply at the pegged price and the risks of contracting a large number of suppliers without proper vetting. FAM once again requests an audience with the Ministry.
4 <sup>th</sup> December 2021	The Nation article: <i>AIP in crisis</i> .  Center for Social Accountability and Transparency (CSAT)  Executive director Willy Kambwandira confirms that AIP has been facing many challenges including congestion, insufficient selling points, vendors buying national identity cards from beneficiaries and long stock out periods in ADMARC.
7 <sup>th</sup> December 2021	The Nation article: ACB probes 30 AIP graft cases. The Anti-Corruption Bureau (ACB) Director General Martha Chizuma states ACB has opened 30 files for investigations related to sale of inputs under AIP where some officers were allegedly demanding extra money from farmers.
21 <sup>st</sup> December 2021	The Ministry of Agriculture publishes a press release noting that there have been reports of the sale of adulterated fertilizer under the program and that it is working hand in hand with MBS to bring the perpetrators to justice.
28 <sup>th</sup> December 2021	The Nation article: <i>No end to AIP mess</i> . Article details the Minister of Agriculture Hon. Lobin Lowe's press briefing to journalists in Lilongwe on 27 <sup>th</sup> December where he stated that AIP has been riddled with counterfeit fertilizer.
28 <sup>th</sup> December 2021	The Daily Times article: AIP faces hitches.
	The article details a press briefing by Hon. Minister Lobin Lowe where he disclosed that only about 60 fertilizer suppliers out of the 166 under the AIP have entered the market.
5 <sup>th</sup> January 2022	Nation article: Government sticks to MK27,000 fertilizer price.  The Ministry states it cannot adjust the price of fertilizer despite a recommendation from MwAPATA Institute for a price review in order to end the standoff with suppliers. The Institute says the standoff is causing limited supply which will negatively affect maize production.
21 <sup>st</sup> January 2022	Ministry of Agriculture does audit of fertilizer suppliers by requesting documents verifying source and authenticity of their fertilizer stock.
2 <sup>nd</sup> February 2022	Ministry of Agriculture allows beneficiaries to redeem two bags of NPK due to the scarcity of Urea in the country.

5 <sup>th</sup> February 2022	The Ministry of Agriculture conducts a stock verification tour of FAM member's facilities in Lilongwe.
8 <sup>th</sup> February 2022	The Ministry of Agriculture conducts a stock verification
	tour of FAM member's facilities in Blantyre.
18 <sup>th</sup> February 2022	The Minister of Finance announces that the AIP budget for
	2022/2023 has been reduced to MK109 billion, and that
	next season Government will buy directly from
	manufacturers without using middlemen as an
	expenditure control measure.
2 <sup>nd</sup> March 2022	Ministry of Agriculture requests that suppliers provide
	documentation to verify existence of stocks by 10 <sup>th</sup> March
	2022 in order to receive payment.
4 <sup>th</sup> March 2022	Ministry of Agriculture allows beneficiaries to redeem two
	bags of Urea where NPK is not available in the country.
14 <sup>th</sup> March 2022	AIP officially ends.

### Table 8: AIP Redemptions List by District

90%-100%	
80%-90%	
70%-80%	
Less than 70%	

		District	EUU	Allo	ocation (M1	Γ)	Inp	ut Redempt	ion	Percenta	ge Redemp	tion (%)
		District	FHH	NPK	Urea	Total	NPK	Urea	Total	NPK	Urea	Total
1	Z	Chitipa	62,871	3,144	3,144	6,287	2,388	2,417	4,805	76%	77%	76%
2	<u>8</u> ₽	Karonga	66,412	3,321	3,321	6,641	1,564	1,559	3,123	47%	47%	47%
3	REC	Rumphi	43,545	2,177	2,177	4,355	1,823	1,806	3,629	84%	83%	83%
4	Z I	Likoma	2,780	139	139	278	60	60	120	43%	43%	43%
5	뽀	Nkhata Bay	55,336	2,767	2,767	5,534	1,577	1,506	3,084	57%	54%	56%
6	ORT	Mzimba North	100,185	5,009	5,009	10,019	3,669	3,224	6,893	73%	64%	69%
7	ž	Mzimba South	124,475	6,224	6,224	12,448	5,668	5,654	11,322	91%	91%	91%
		TOTAL	455,604	22,780	22,780	45,560	16,750	16,225	32,975	74%	71%	72%

8	Kasungu	153,805	7,690	7,690	15,381	7,242	7,057	14,299	94%	92%	93%
9	Nkhotakota	90,555	4,528	4,528	9,056	4,111	3,762	7,873	91%	83%	87%
10 <b>8</b>	Ntchisi	75,858	3,793	3,793	7,586	3,559	3,492	7,051	94%	92%	93%
11 <b>ପ୍ର</b>	Dowa	175,377	8,769	8,769	17,538	7,556	6,952	14,508	86%	79%	83%
12	Mchinji	139,931	6,997	6,997	13,993	6,746	5,880	12,626	96%	84%	90%
13	Lilongwe West	294,416	14,721	14,721	29,442	13,389	12,735	26,124	91%	87%	89%
14 <b>E</b>	Lilongwe East	245,495	12,275	12,275	24,550	10,990	10,162	21,152	90%	83%	86%
15	Salima	104,102	5,205	5,205	10,410	4,624	4,149	8,773	89%	80%	84%
16	Dedza	198,060	9,903	9,903	19,806	9,881	9,662	19,543	100%	98%	99%
17	Ntcheu	141,382	7,069.10	7,069	14,138	6,219	5,966	12,185	88%	84%	86%
	TOTAL	1,618,981	80,949	80,949	161,898	74,318	69,815	144,132	92%	86%	89%

		District	FILL	Allo	ocation (MI	)	Inp	ut Redempti	on	Percentag	ge Redemp	tion (%)
		District	FHH	NPK	Urea	Total	NPK	Urea	Total	NPK	Urea	Total
18		Mangochi	229,655	11,483	11,483	22,966	10,621	9,621	20,242	92%	84%	88%
19		Balaka	100,240	5,012	5,012	10,024	4,556	4,170	8,726	91%	83%	87%
20		Machinga	174,594	8,730	8,730	17,459	7,732	7,075	14,807	89%	81%	85%
21	ž 📗	Neno	41,618	2,081	2,081	4,162	1,079	954	2,033	52%	46%	49%
1 //	မ္ပ	Blantyre	168,437	8,422	8,422	16,844	6,519	5,854	12,373	77%	70%	73%
	<b>K</b> E	Zomba	170,922	8,546	8,546	17,092	8,017	7,413	15,430	94%	87%	90%
24	z I	Mwanza	25,315	1,266	1,266	2,532	792	745	1,537	63%	59%	61%
25	出	Chiradzulu	102,045	5,102	5,102	10,205	3,956	4,009	7,965	78%	79%	78%
261	፟ዾ	Phalombe	118,025	5,901	5,901	11,803	5,501	5,338	10,839	93%	90%	92%
	င္တ	Chikwawa	107,707	4,461	4,461	8,922	3,812	3,756	7,568	85%	84%	85%
28		Thyolo	192,234	9,612	9,612	19,223	8,800	8,476	17,276	92%	88%	90%
29		Mulanje	165,499	8,275	8,275	16,550	7,477	7,214	14,691	90%	87%	89%
30		Nsanje	72,938	3,076	3,076	6,152	2,583	2,560	5,144	84%	83%	84%
		TOTAL	1,669,229	81,966	81,966	163,932	71,444	67,186	138,631	87%	82%	85%
		National Totals	3,714,110	185,706	185,706	371,411	162,512	153,226	315,738	88%	83%	85%

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