Joint appraisal report

Country	Nicaragua
Reporting period	Year 2014
Fiscal period	Year 2014
Graduation date	Year 2021

1. EXECUTIVE SUMMARY

Nicaragua, situated in the centre of the Central American isthmus, covers a total area of 130,373.4 km². For administrative purposes, it is divided into 15 departments, two autonomous regions and 153 municipalities. The country has three geographical regions: Pacific (with a predominantly urban population, various social and environmental risks, and where purveyors of goods and services are concentrated); North Central (predominantly rural population, agricultural and livestock development, but little in the way of road infrastructure and services); and Atlantic (mostly indigenous population, high rates of extreme poverty, a scattered population, low levels of education, poor access to social services, and high rates of maternal and infant mortality).

The Ministry of Health is the main health services provider and, by law, is the sector's governing institution. With the implementation of the Comprehensive Healthcare Model, now called the Family and Community Healthcare Model (MOSAFC), the Ministry meets the needs and expectations of the population, with the goal of providing equitable, comprehensive and high-quality healthcare with caring and respect, ensuring the right to health, a fundamental pillar of the Government of Reconciliation and National Unity's policies. The model includes different expanded programme on immunization (EPI) strategies to keep the population protected from vaccine-preventable diseases: routine or systematic vaccination at health units, National Health Day, school immunisations, and follow-up campaigns.

The programme's coverage indicators are systematically monitored through the Government of Reconciliation and National Unity's Information System (SIGRUN), which serves national, regional and local authorities as a reference for decision-making.

Since 2006, Gavi aid has been integrated into this policy and the Comprehensive Healthcare Model through its support for various activities to improve the supply and quality of health services and to strengthen citizen participation and improve the cold chain. Projects include Injection Safety Support (2006 to 2008, with an extension in 2009), Health System Strengthening (HSS 2008 to 2011), Immunisation Services Support (ISS 2008 to 2011), and New Vaccine Support (NVS 1 and NVS 2 in 2010). In 2014, Gavi contributed 21.25% of the total budgeted expenditure for immunisations to meet priority indicators in harder-to-reach municipalities, according to the 2014 Progress Report. The country covers 75% of the total expenditure.

With the help of the Gavi Alliance and other current projects in the region, the provision of healthcare has been achieved in 36 municipalities in harder-to-reach departments, such as Bilwi, Matagalpa, RAAS, Jinotega, Nueva Segovia, Madriz, Boaco, Chontales, Las Minas and Managua, allowing the population access to health services and reducing the percentage of municipalities with less than 95% coverage to 22% (33 municipalities) at the end of 2014.

Gavi aid targets and objectives for vaccination coverage with programme biologicals (rotavirus and PCV-13) have been exceeded. It is important to note that although support is targeted at these vaccines, the national vaccine schedule is comprehensively applied, maintaining vaccination coverage and meeting targets for the monodose vaccine wastage rate and the dropout rate, which show improvement over the baseline year and are in line with EPI technical standards. Nonetheless, national and sub-national values hide the realities faced by municipalities in terms of both coverage and dropout rates,

due in large part to the fact that, in spite of their efforts, the approach is costly and difficult, depending upon accessibility.

The denominator for setting targets and meeting them remains a determining factor. Population figures are steadily declining; however, the number of administered doses is on the rise, resulting in coverage greater than 100%, thus gradually shrinking biological reserves. For example, when reviewing the rotavirus vaccine received in 2014, the under-age-one group consisted of 137,631 children, who require two doses, thus establishing a need for 275,262 doses plus 5% wastage, for a total of 289,025 doses. With that said, only 241,700 doses were received, for a difference of 47,325 doses. Although we avoided a shortage on account of our reserves, approval for fewer doses than those required depletes these reserves, which may lead to supply problems in the short term. We currently have a two-month reserve of this vaccine; however, if we continue to receive fewer doses than required, this reserve could be exhausted.

Based on the country's previous experience concerning the introduction of new vaccines such as rotavirus and PCV-13 in past years, the introduction of the inactivated polio vaccine (IPV) is projected for the last quarter of 2015. The vaccine would be universally administered to two-month-old children throughout the country. A plan has been developed for the introduction of the vaccine, which includes a schedule of activities to be implemented.

The support provided by Gavi remains within the framework of the Nicaraguan Healthcare Fund (FONSALUD) as a strategy that aligns governmental and nongovernmental organisations in supporting health actions defined in accordance with guidelines for national priorities. The 2013 Gavi Visit Report states that supervision and monitoring of the use of funds to avoid poor performance have been strengthened. This was achieved despite late disbursement of funds and without affecting programming periods, by optimising fiscal resources to meet objectives and priority indicators for Health System Strengthening, with an emphasis on immunisation. Given that the funds allocated for 2013 and 2014 were received in 2014, their implementation will be completed in 2015. The funds pending for 2015, if received, would be implemented in 2015-2016.

	2013	*2014	2015	TOTAL
Budget planned in accordance with AOP, by year	553,250.00	620,566.00	632,284.00	1,806,100.00
Funds received		1,353,596.00		1,353,596.00
Funds implemented		711,444.95	604,085.54	1,315,530.49

*Funds were received in May 2014.

The PAHO/WHO country representation has served as the main partner in the support and implementation of strategies and policies established by Gavi, developing multiple activities related to the contents of this project throughout the country.

Future needs for EPI development in the country include the construction, implementation and operation of at least two regional vaccine storage facilities at the national level; the implementation of freeze indicators during vaccine transport; the completion of a national survey on vaccination; and the monitoring of vaccination data quality at the municipal level.

Gavi Grant Portfolio Overview. The Ministry of Health is the main health services provider and, by law, is the sector's governing institution. The General Health Law and its regulations, Law 423, article 38, mandate the creation of the Family and Community Healthcare Model (MOSAFC), a model that

meets the needs and expectations of the population, with the goal of providing equitable, comprehensive and high-quality healthcare with caring and respect, and ensuring the right to health, a fundamental pillar of the Government of Reconciliation and National Unity's policies. The model includes different EPI strategies to keep the population protected from vaccine-preventable diseases, and to this end, various strategies recommended by PAHO/WHO are utilised, such as systematic vaccination at health centres, national immunisation days, school immunisations, and follow-up campaigns. In addition, it is supported by integrated vaccination brigades that operate in remote geographical areas and rapid coverage monitoring, which have allowed for detection of the unvaccinated. The programme's coverage indicators are systematically monitored through the Government of Reconciliation and National Unity's Information System (SIGRUN), which serves national, regional and local authorities as a reference for decision-making.

Implementation of the MOSAFC is a road to achieving equity, a challenge that requires ensuring access to health services and reducing barriers to care. The implementation steps of the model provide for the processes of sectorisation, continuous assessment, and preparation of the community diagnosis. The country is currently in the process of revising the sectorisation, based on the new administrative distribution of the country's 19 integrated local health systems (SILAIS), to ensure community access to health services.

Since 2006, Gavi aid has been integrated into this policy and the Comprehensive Healthcare Model through its support for various activities to improve the supply and quality of health services and to strengthen citizen participation and the cold chain. Projects include Injection Safety Support (2006 to 2008, with an extension in 2009), Health System Strengthening (HSS 2008 to 2011), Immunisation Services Support (ISS 2008 to 2011), and New Vaccine Support (rotavirus and PCV-13 in 2010).

Gavi contributes 21.25% of the total budgeted expenditure for immunisations to meet targets established by the programme, while the country covers 75% of the total expenditure. With the help of Gavi, the provision of healthcare has been achieved in 36 municipalities in harder-to-reach departments, such as Bilwi, Matagalpa, the Southern Caribbean Coast Autonomous Region (RACCS), Jinotega, Nueva Segovia, Madriz, Boaco, Chontales, Las Minas and Managua, allowing the population to access comprehensive health services in these regions.

The country introduced the rotavirus vaccine and PCV-13 in 2006 and December 2010, respectively, a period during which all recommended strategies were implemented to achieve established targets. In 2009, the rotavirus vaccine coverage rate reached 94% nationally, and since 2010, nationwide coverage rates of 95% or greater have been achieved. Since 2012, PCV-13 coverage rates of 95% or greater have been achieved at the national level; however, the geographically-remote SILAIS of Bilwi, Nueva Segovia, RACCS, Madriz and Jinotega have reported coverage below 95% every year since the vaccine's introduction. These rates stem from the fact that approximately 50% of their municipalities report coverage below 95%, as a consequence of being in areas of remote access, together with the aforementioned statement that the assigned population is inaccurate.

When the rotavirus vaccine was introduced, there were two WHO prequalified vaccines: a three-dose vaccine and a two-dose vaccine. Efficacy studies showed that both vaccines offered equal protection. Nicaragua decided to use the three-dose vaccine, administered at two, four and six months of age, which was donated during the 2006-2009 period. Gavi has provided support for this vaccine in Nicaragua since 2010. In November 2014, the country switched from the three-dose rotavirus vaccine to the two-dose version. In the case of children who had already started with the three-dose vaccine, the three-dose schedule was completed; the new two-dose schedule was implemented with two-month-old children, with the second dose administered at four months of age.

The global status of polio remains a challenge worldwide, even for those countries without cases, as they are exposed to the possibility of importation of cases from countries where polio still exists. Due to this risk, Nicaragua has aligned itself with the objectives of the Polio Eradication and

Endgame Strategic Plan by developing the IPV Introduction Plan. The introduction of one dose of inactivated poliovirus vaccine (IPV) at two months of age, followed by two doses of oral polio vaccine (OPV), has been scheduled for October 2015.

1.1. Summary of grant performance, challenges and key recommendations

Grant performance (programmatic and financial management of NVS and HSS grants)

Achievements

- The country has achieved rotavirus vaccine coverage of over 95% nationwide since 2010 and PCV-13 coverage ≥ 95% nationwide since 2012.
- In 2012, 75% of municipalities achieved a coverage rate of ≥ 95%.
- The country adopted the nine Effective Vaccine Management (EVM) criteria and trained healthcare personnel at all levels.
- Sentinel surveillance of rotavirus, meningitis and bacterial pneumonia was implemented in 2011 and has been maintained to date.
- Achievement of 100% compliance with scheduled comprehensive visits to remote communities. In addition, 78% of municipalities have increased vaccination coverage with penta3 by 3.3% and 86% have improved the dropout rate.
- 83% of the proposed assessment process has been completed.
- 89% of communities/neighbourhoods maintain up-to-date follow-up logs for individual immunisation records and schedules.
- 92% of municipalities submit statistical reports in a timely and satisfactory manner.
- 75% of health personnel in priority municipalities are trained on the management components of the immunisation programme, including surveillance of vaccine-preventable diseases, thereby allowing for compliance of over 80% with international quality indicators for the surveillance of measles, rubella and acute flaccid paralysis (AFP).
- 60% of community stakeholders within priority SILAIS are trained on EPI issues, key practices, birth plans, the management census, and community-based distribution of contraceptives (ECMAC).
- Strengthening of the cold chain in priority municipalities through the purchase of equipment and the training of 92% of health personnel on cold chain technical standards.

Challenges

- Having an accurate denominator available, since the planning of targets for key health indicators is based on projections by the National Institute of Development Information (INIDE).
- Maintain coverage rates ≥95% in 75% of municipalities.
- Maintain the epidemiological surveillance system for vaccine-preventable diseases (VPD) and events supposedly attributable to vaccination or immunisation (ESAVIs).
- Build and set up three regional vaccine storage facilities, purchase cold-chain equipment, and expand departmental storage in Matagalpa, Madriz and Managua, designating them as priority departments, which was a recommendation of the EVM evaluation.
- Carry out operational research to improve programme components and increase coverage.
- Complete the process of re-sectorisation, continuous family assessment, and community diagnosis.

Key recommended actions to achieve sustained coverage and equity

- Maintain integrated health brigades and rapid coverage monitoring.
- Maintain and strengthen processes that allow for community participation in health.
- Strengthen management processes at the intermediate and local levels (planning, VPD surveillance, ESAVIs, monitoring, evaluation and information systems).
- Strengthen data quality processes for the immunisation programme, use of the log, and use of information for decision-making

- Strengthen the competencies of the personnel who provide direct healthcare.
- Strengthen the cold chain at the local level based on EVM recommendations, eg, build cold rooms, update equipment, and modernise the temperature monitoring system.

1.2. Requests to Gavi's High Level Review Panel

Grant Renewals
New and underused vaccine support • Renewal of co-financing for rotavirus vaccine and PCV-13 • Support the introduction of IPV, with a guarantee of support for three years; from then on, establish co-financing mechanisms **Health system strengthening support** • Final disbursement of the HSS grant • Calculation and disbursement of performance-based financing (PBF) given the high coverage rates linked to HSS grant performance

1.3. Brief description of joint appraisal process

Templates and guidelines for the joint appraisal were sent in March 2015. In May 2015, the annual progress report was submitted through the Gavi platform. Once the date of the joint appraisal was agreed upon, coordination meetings between the Ministry of Health's technical team and PAHO began in order to define a schedule and plan of activities to follow. In order to formalise the process and define roles and responsibilities in advance, the Ministry of Health sent a letter to stakeholders, inviting them to participate in meetings in preparation for the Joint Appraisal.

A desk evaluation was prepared that enabled progress with the joint appraisal process, for the purpose of clarifying expectations for the management of the Gavi grant and ensuring that the process is tailored to the country's needs. These actions were aimed at ensuring good communication with members of the joint appraisal team at the Ministry of Health, setting meeting dates and locations, listing primary sources of information, communicating the working agenda to all country stakeholders, and setting dates for the revision of the joint appraisal report, among others. Furthermore, feedback on major accomplishments, challenges and lessons learned by the SILAIS, a review by members of the Sectoral Roundtable or Interagency Committee, and analysis of the document by the team assembled for the joint appraisal have contributed to gradual improvements to the document.

In July 2015, a conference call was held between the Ministry of Health, PAHO and Gavi in order to plan and coordinate the preparations for the joint appraisal. Additionally, several conference calls were held with the technical teams to ensure the optimal development of the joint appraisal process.

The meeting, held at the national level, evaluates the support received in 2014 for the introduction of new vaccines and for HSS, with an emphasis on immunisations. The joint appraisal team is responsible for conducting the evaluation and reporting its findings.

2. COUNTRY CONTEXT

2.1. Comment on the key contextual factors that directly affect the performance of Gavi grants

The Government of Reconciliation and National Unity's social programmes aimed at poverty – particularly extreme poverty – have a direct positive impact on the health situation of the Nicaraguan population, especially the most vulnerable sectors.

The Ministry of Health is the main health services provider and, by law, is the sector's governing institution. Within the framework of comprehensive healthcare and with broad community and intra- and inter-sectoral participation, the Expanded Programme on Immunization (EPI) is considered a national priority, which is supported by a legal basis and the political will of the government. The Ministry of Health has prioritised the purchase of vaccines, syringes and sharps boxes to ensure the proper functioning of the EPI. It has highly qualified personnel who are motivated and committed to the programme's actions, which ensures the delivery of high-quality immunisation services in a sustainable, safe and effective manner.

Social determinants (especially poverty), difficult geographical access, and cultural access affect the Nicaraguan people. With specific regard to vaccination, this translates into low coverage and high dropout rates. In order to immunise the children living in these areas, strategies such as integrated vaccination brigades, house-to-house vaccination, and national immunisation days, among others, are required. That is why in recent years, with support from PAHO, the IDB, Gavi and other development partners, we have managed to move into these zones – where these determinants persist and it has become more difficult to improve these indicators – reducing the percentage of municipalities with coverage under 95% to 33 (or 22%) of the 153 municipalities at the end of 2014. Of the total budget allocated to immunisations, 75% is provided by the Nicaraguan government, 21.25% by Gavi, and less than 5% by other agencies present in the country, a breakdown that reveals the parties' commitment to supporting immunisation as a government priority (table 5.3a of the 2014 Progress Report). The government has met 100% of its planned co-financing obligations from the beginning, which is reflected in table 7.4 of the 2014 Progress Report.

The country has undergone several international evaluation processes that included an evaluation of the cold chain (2007), an evaluation of the programme (2010), and an evaluation of vaccine stock supply management (VSSM) (2012). In 2015, an EVM evaluation was conducted, which seeked to analyse cold-chain storage capacity and the management of vaccines and supplies at all levels. The country obtained 80% or higher for the nine scoring criteria at all levels, with an overall country score of 93%.

With Gavi HSS support and its emphasis on immunisation, the country establishes a focus on the following: improving the supply and quality of health services, especially immunisation services, by supporting the implementation of MOSAFC; strengthening organised citizen participation in the development of community strategies; and strengthening the cold chain through the purchase of 76 refrigeration units with replacement parts through PAHO.

To improve cold-chain capacity in other non-Gavi municipalities, 142 units are being procured with support from the World Bank. Thirty additional units will be purchased using the performance-based payment awarded by Gavi for immunisation coverage; however, it is necessary to continue strengthening the cold chain at the local level.

3. GRANT PERFORMANCE, CHALLENGES AND RENEWAL REQUESTS

3.1. New and underused vaccine support

3.1.1. Grant performance and challenges

Programme performance and challenges:

The country introduced the rotavirus vaccine and PCV-13 in 2006 and 2010, respectively, implementing all recommended strategies to achieve established targets. In 2009, the rotavirus vaccine coverage rate reached 94% nationally, and since 2010, nationwide coverage rates of 95% or greater have been achieved. Since 2012, PCV-13 coverage rates of 95% or greater have been achieved at the national level; however, the geographically-remote departments of Bilwi, Nueva Segovia, RACCS, Madriz and Jinotega have reported coverage below 95% since the vaccine's introduction.

The under-5 mortality rate fell from 24.16 per 1,000 live births in 2010 to 20.36 per 1,000 live births in 2014. This progressive reduction in the mortality rate for children under 5 is associated with increased immunisation coverage, sanitation programmes, the promotion of breastfeeding, and other disease control initiatives implemented by the central government.

The dropout or abandonment rate reflects acceptable values within the range set by the programme in the national standards (+5 to -5) for the pentavalent vaccine (DTP) in children under the age of 1, attaining a value of -1 for 2014.

The introduction of these new vaccines and the implementation of Gavi HSS support have helped to strengthen routine vaccination of priority groups as well as outreach activities, which, in addition to immunisation, include the delivery of a comprehensive healthcare package, which guarantees immunisations and the right to health for hard-to-reach populations.

Proper planning and management of the supply of biologicals and consumables meant no supply shortages this year, which, in turn, has allowed for fulfilment of planned targets, since the supply of these items is guaranteed in a timely and satisfactory manner at each health unit. The indicator for the monodose vaccine wastage rate was met, on the basis of wastage rates calculated for the baseline year. **Progress on the implementation of new vaccine introductions/campaign for the period in question:**

The introduction of the rotavirus vaccine and PCV-13 has been successful, as evidenced by the sentinel surveillance system. The country has conducted sentinel surveillance for rotavirus, pneumonia and bacterial meningitis since 2011.

Based on the country's previous experience concerning the introduction of new vaccines such as rotavirus and PCV-13 in past years, the introduction of the IPV is projected for the last quarter of 2015. The vaccine would be universally administered to two-month-old children throughout the country. The vaccine introduction plan developed for IPV is already being implemented.

The status of polio remains a challenge worldwide. Nicaragua has aligned itself with the objectives of the Polio Eradication and Endgame Strategic Plan by developing the IPV Introduction Plan. In this regard, the strengthening of VPD surveillance is a key component of the plan. The country is focused on compliance with international VPD surveillance indicators.

Key obstacles and corrective measures, together with system components

The denominator for setting coverage targets and meeting them remains a determining factor. According to census projections, our population of children under the age of one is declining, but the number of doses administered proves that there are more children than projected. Strategies to work around the denominator problem include rapid coverage monitoring, use of follow-up logs as individual immunisation records at the local level, collaboration with municipalities on local censuses, and continuous assessment (the classification of every family in every community). With the availability of funding, the country could request technical assistance to conduct a coverage survey as well as strengthening the information system.

Due to underestimation of the country's population denominator, vaccine forecasting was affected. The vaccine supply was sufficient in 2014, but given the demand forecasted for 2015 and onward, an increase in the supply of vaccine doses was proposed.

Remote municipalities represent a particular challenge:

- Their cultural, social and economic characteristics pose a key challenge to the development of activities and fulfilment of objectives. Natural disasters are a frequent occurrence in these regions, an issue that could also hinder access and, therefore, compliance with indicators. A profile of these municipalities and localities is required in order to redefine programme activities in accordance with the socio-cultural, economic, demographic, and geographic needs and characteristics of each place.
- The HSS disbursement delay in 2014 affected the development of the activities planned for these municipalities. (See section 3.2.)

Financial performance and challenges:

- **Current financial costs versus projected financial costs**

No new vaccines were introduced in 2014, so there was no subsidy for this period; however, a change was made from the three-dose rotavirus vaccine to the two-dose version.

The central government has met 100% of planned co-financing obligations for the supply of PCV-13 and rotavirus vaccine. The country has structured the financing for the new vaccines on the immunisation schedule, gradually assuming 100% of their cost. The request for continued co-financing has been confirmed until 2020.

Key challenges

- The operating costs of vaccination activities in remote municipalities is extremely high and is largely assumed by the Nicaraguan government, requiring support from Gavi and related agencies, such as PAHO/WHO and Mesoamerica, to cover the total cost.

Complementarity among vaccine introduction grants (VIGs), operating costs and HSS funds

The established indicators for this project are harmonised on the basis of the country's heath priorities and commitments. The MOSAFC strengthens the focus on improving the quality of health services and the active participation of the family and organised communities. These activities are carried out by family and community health teams, which monitor the implementation and evaluation of programmes at different levels of care.

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Overall financial capacity of the NVS grant managing bodies

No new vaccines were introduced in 2014.

The country has fully met its co-financing obligations, and no challenges are anticipated in the future in this regard.

3.1.2. NVS renewal request / Future plans and priorities

Currently approved vaccines:

Rationale for the targets for the next year of implementation

Given the existing challenges regarding official population denominators, it has been determined that the number of doses required – and therefore the supply – of both rotavirus vaccine and PCV-13 have been underestimated. Gavi has agreed to make an adjustment to

the supply based on the number of doses administered since 2014, an action that is necessary to recover the stock of vaccine reserves. The proposed adjustment is being reviewed by the Secretariat.

Plans to change the presentation(s) or type(s) of vaccine(s)
With regard to the rotavirus vaccine, all three-dose schedules begun in 2014 will be completed in 2015, and the switch to the new two-dose schedule will continue, maintaining coverage at 100%.

The introduction of one dose of IPV at two months of age is scheduled for October 2015. Monodose vials were requested; however, the only presentation available this year is a five-dose vial. Nicaragua has accepted this presentation for the introduction; however, this involves increasing the wastage rate from 5% to 15%, thereby changing the number of doses to be received.

Future implementation risks and mitigating actions

- Late disbursement of funds affects programming periods, requiring the optimisation of fiscal resources in order to meet targets and indicators for immunisation and other components.

- Target-setting is based on underestimated population data provided by INIDE, so we run the risk of not receiving the number of doses necessary to vaccinate our beneficiary population.

Priorities for new applications or new immunisation programmes

Routine new vaccines support

- An Expression of Interest for continued support for PCV-13 and rotavirus vaccines as well as the introduction of the human papillomavirus vaccine (HPV) was recently submitted to the Gavi Secretariat, following a cost-effectiveness study and sustainability assessment.

3.2. Health systems strengthening (HSS) support

3.2.1. Grant performance and challenges

Programme performance and challenges:
Achievement of objectives and intermediate results

- **ISS, HSS, CSO support:**
  1. **Bring quality health services to remote communities:**
     - Achievement of 100% compliance with scheduled comprehensive visits to remote communities. In addition, 78% of municipalities have increased penta3 vaccination coverage by 3.3% and 86% have improved the dropout rate.
     - Strengthening of the continuous assessment (classification) of families at greatest risk in communities and sectors. This corresponds to 83% [sic].
     - Conduct scheduled visits for supervision, monitoring and evaluation at the SILAIS, municipalities, and health units, using official guidelines for the monitoring of priority indicators.

     Strengthening of the information system
     - 89% of communities/neighbourhoods maintain up-to-date follow-up logs for individual immunisation records and schedules.

- 92% of municipalities submit statistical reports in a timely and satisfactory manner.

2. **Strengthen the training of health personnel and educators in remote communities:**
   - Health personnel in priority municipalities trained on the management components of the immunisation programme, including surveillance of VPDs
   - 36 municipalities conduct a health situation analysis to serve as a baseline for the 2015 plans.
   - Training of community personnel in priority communities on EPI issues, key practices, birth plans, the management census, and ECMAC
   - The government promotes community involvement. Civil society organisations – framed as community members in the Family, Community and Life Councils (GFCV) – brigade members, midwives, and others do not receive funds, but they are given training and promotional materials as a base of support for their community participation in health.
   - 86% of communities have a complete community diagnosis, and of these, 81% have implemented improvement plans.

3. **Strengthen the cold chain.**
   - Strengthening of the cold chain in priority municipalities was achieved through the purchase of equipment.
   - Health personnel were trained on cold chain technical standards.

Implementation of current activity versus planned activity

In line with planned targets and through the implementation of MOSAFC, quality health services were brought to remote communities; however, 17% of families still need to be classified.

Given that supervision is a management component that should be ongoing and systematic, supervision, monitoring and evaluation visits should be continued at the SILAIS, municipalities, and health units, using official guidelines for the monitoring of priority indicators.

With regard to the information system, we must continue working so that 100% of municipalities update follow-up logs, submit timely statistical reports, and use information for decision-making.

The strengthening of management processes at the intermediate and local levels must continue, as well as the training of health personnel in priority municipalities on the management components of the immunisation programme, including surveillance of VPDs, data quality, and the use of information for decision-making.

Furthermore, we must strengthen the training of community personnel on EPI issues, key practices, birth plans, the management census, and ECMAC and continue to prepare a complete community diagnosis and improvement plan.

Although the cold chain has been strengthened, the actions recommended by the EVM evaluation performed in 2015 must be implemented.

Extent of key stakeholder participation in the implementation of the HSS proposal, including civil society organisations

The MOSAFC is based on the active participation of the family and organised communities, with the goal of improving the delivery of primary healthcare services and bringing health services to remote communities with the support of the organised community. Civil society participates through community organisations, such as Family, Community and Life Councils, where youth, men and women are actively involved in managing the health of their own families and communities. The involvement of other partners such as the IDB - Mesoamerica, World Bank, UNICEF, and PAHO has supported the achievement of these objectives.

Obstacles to implementation, corrective measures and lessons learned

Natural disasters, deteriorating roads, and high transportation costs (fuel, vehicle maintenance and travel allowances) hinder visits to at-risk communities, so organised community support is

greatly needed, as well as the availability of human and financial resources to access these communities.

Inaccessibility prevents 100% of these communities from being reached, but health brigades can reach remote locations and support sector centres in local planning.
As previously mentioned, funds were received late, affecting programming periods.

Compliance with data quality and research requirements
In accordance with the goals set for determining data quality, 32 of the 36 priority municipalities (88%) established 100% compliance with record review and use of the follow-up log. Furthermore, 100% of priority municipalities submit statistical reports, and 92% do so in a timely and satisfactory manner. The most recent data quality survey was conducted in 2010. It was determined to have 95% accuracy, so it will be necessary to perform a new data quality survey next year.

Follow-up with the recommendations from any available HSS assessment report
As of yet, an evaluation of the HSS project has not been performed; however, recommendations were received from Gavi after the Annual Progress Report was prepared, and follow-up action has been taken concerning compliance, especially with regard to the determination of the denominator for calculating coverage.

Overall programme capacity of the HSS grant managing bodies
Financial performance and challenges

Financial performance

	2013	2014 *	2015	TOTAL
Budget planned in accordance with AOP, by year	553,250.00	620,566.00	632,284.00	1,806,100.00
Funds received		1,353,596.00		1,353,596.00
Funds implemented		711,444.95	604,085.54	1,315,530.49

*Funds were received in May 2014.

Given that the funds allocated for 2013 and 2014 were received in May 2014, their implementation will be completed in 2015. The funds pending for 2015 would be implemented in 2015-2016. The late disbursement did not restrict internal management; transfers to the highest-priority municipalities and the procurement of items to strengthen EPI operations management were made during the period. In fact, the limiting factor for the fulfilment of established objectives has been the difficulty in accessing communities, exacerbated by rainy weather and deteriorating roads.

External audits conducted in previous years (2012 and 2013) have established the programme's financial capacity, as evidenced by the management of funds received, in accordance with established standards and procedures. No relevant findings were made. The 2014 audit is expected to be presented in September 2015.

In 2014, a total of US$ 179,780.00 was received as a performance-based payment from Gavi (allocated to the strengthening of immunisation services) for compliance with optimal coverage rates in the country. That amount was implemented and accounted for in accordance with established regulations, in line with the actions planned for the strengthening of immunisation activities in high-risk areas.

3.2.2. Strategic focus of HSS grant

As previously described, the Government of Reconciliation and National Unity's social programmes aimed at poverty – particularly extreme poverty – have a direct positive impact on the health situation of the Nicaraguan population, especially those most vulnerable.

The overall objective of the National Human Development Plan is to reduce inequality by focusing on the fight against poverty, reducing spending and increasing investment in social sectors and rural infrastructure, and improving access to healthcare as one of the main determinants.

Currently, in an effort to improve healthcare for the Nicaraguan people, the country is divided into 19 SILAIS, which form a network of services for the delivery of all healthcare benefits. This network is organised into two levels of resolution (primary and secondary levels) of growing complexity, which respond to the principles of the MOSAFC. Vaccines are administered at primary and secondary health units and at the community level through the 1,032 family and community health teams (ESAFC).

Through the HSS grant, Gavi incorporates this model into the goal of improving vaccination coverage in priority municipalities for all biologicals, through the strengthening of the organisation of community work, management and participation based on local planning and support for the provision of basic maternal and child health services in areas of difficult access.

The strategic lines of action for meeting this objective are to improve the supply and quality of health services, especially immunisation services, by supporting the implementation of the MOSAFC; strengthen organised citizen participation in the development of community strategies; and strengthen the cold chain.

3.2.3. Request for a new tranche, no-cost extension, re-allocation or reprogramming of HSS funding / Future HSS application plans

Nicaragua, like other countries in the region, has established alliances that support governments in the introduction of new vaccines and improve and expand the scope of immunisation services to protect the entire population, a goal that has been supported by Gavi in recent years. This has served to gradually strengthen the country's immunisation programme and improve coverage in hard-to-reach areas, which has been a government priority. Furthermore, there has been a reduction in the number of municipalities with coverage below 95%, from 65 municipalities in 2010 to 33 municipalities in 2014, which equates to 76% of municipalities with useful coverage rates (greater than 95%), achievements that must be maintained and surpassed.

There are commitments from countries in the region of the Americas to move toward universal healthcare. Not only does this involve national coverage rates above 95%, but it also requires 100% of the municipalities to cover all vaccines included in the national immunisation programme. Each year new breakthrough goals must be set to continue strengthening immunisation services and assuring quality vaccines to the population living in remote areas, with an emphasis on at-risk and hard-to-reach areas, until the goal is achieved.

This commitment also makes it necessary for the benefits of immunisation to reach all citizens both equitably and with quality. Although our country is beginning the graduation process, co-financing support is still necessary as the country works toward fulfilling its commitment to increase its share of co-financing, until it fully assumes this cost in 2021.

3.3. Graduation plan implementation (*if relevant*)

The plan is under development; awaiting approval and financing.

3.4. Financial management of all cash grants

Despite having received the scheduled funding late, the timeline was modified, allowing for the fulfilment of goals and the previously-planned activities aligned with the priorities defined by the Government of Reconciliation and National Unity through the Ministry of Health. The monitoring and control of the processes established for the implementation of funds and financial performance were strengthened.

3.5. Recommended actions

Actions	Management responsibility	Timeline	Potential financial resources needed and source(s) of funding
Maintain integrated health brigades and rapid coverage monitoring.	Ministry of Health/PAHO/WHO	2016-2020	Ministry of Health covers human resources, supplies, and vehicles. Cooperating agencies will provide for transportation costs (travel allowances and fuel).
Maintain and strengthen processes that allow for community participation in health.	Ministry of Health/PAHO/WHO	2016-2020	Ministry is responsible for coordinating, organising, planning and mobilising the community network. Support for **training** will be requested from the community network.
Strengthen management processes at the intermediate and local levels (planning, VPD surveillance, ESAVIs, monitoring, evaluation and information systems).	Ministry of Health/PAHO/WHO	2016-2020	Ministry of Health covers human resources and the implementation of management tools. Cooperating agencies will provide for transportation and personnel **training** costs.
Strengthen data quality processes for the immunisation programme, use of the log, and use of information for decision-making	Ministry of Health/PAHO/WHO	2016	Ministry of Health covers human resources. Support for data quality assessment processes, **training** in the use of information in decision-making, and the use of information system tools will be requested.
Strengthen the competencies of the personnel who provide direct healthcare.	Ministry of Health/PAHO/WHO	2016-2020	Ministry of Health covers human resources. Support for **training** on specific topics, including ESAVIs, will be requested.
Strengthen the cold chain at the local level based on EVM recommendations, e.g., build	Ministry of Health/PAHO/WHO	2016-2020	Develop a proposal for presentation by External

cold rooms, update equipment, and modernise the temperature monitoring system.			Cooperation - MOH to donors.

4. TECHNICAL ASSISTANCE

4.1 Current areas of activities and agency responsibilities

The PAHO/WHO country representative has served as the main partner in the support and implementation of strategies and policies established by the Gavi Alliance, developing multiple activities related to the contents of this project throughout the country. UNICEF, USAID, UNFPA and AECID have also provided monitoring and support.

4.2 Future needs (2016)

Top priority areas requiring technical assistance in the coming year

Support for new vaccine introductions

- Support for an HPV vaccine cost-effectiveness study
- Development and implementation of a proposal and introduction plan for the HPV vaccine

Implementation

- Support for financing integrated health brigades including vaccination and rapid coverage monitoring in remote communities, three times a year

Information System

- Monitoring immunisation data quality at the municipal level.
- Strengthen data quality processes for the immunisation programme, use of the log, and use of information for decision-making

Supervision and evaluation

- Strengthen the supervision, monitoring and evaluation processes fundamental to the SILAIS, municipalities, and health units, using official guidelines for the monitoring of priority indicators.
- Biannual EPI evaluation

Training

- Online training on the management of the immunisation programme and surveillance of VPDs, cold chain operation, and the inventory system
- Strengthen the technical capacity of healthcare resources with regard to monitoring and data analysis for effective decision-making in the EPI

5. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT & ADDITIONAL COMMENTS

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism:

Once the report was presented to the Interagency Coordinating Committee (ICC) members and clarifications and comments were added and accepted, the final document was sent for a second reading. The document was then distributed for the signatures of the representatives of each of the ICC members. Issues raised during debrief of joint appraisal findings to national coordination mechanism:
Any additional comments from • Ministry of Health: • Partners: • Gavi Senior Country Manager (SCM):

6. ANNEXES

- **Annex A. Key data** (this will be provided by the Gavi Secretariat)
- **Annex B. Status of implementation of the key actions from the last joint appraisal and any additional High Level Review Panel (HLRP) recommendations**

Key actions from the last appraisal or additional HLRP recommendations	Current status of implementation
Not applicable, as this is the first joint appraisal.	