 

**Interim Report:**

**Educating women and girls in Nicaragua’s Indigenous region to defend their rights and address violence against women**



Indigenous Miskitu youth participating in a workshop on sexual health and reproductive rights

**Interim Report**

**Presented to the Rotary Club of Brighton**

**By Horizons of Friendship**

**August 25, 2020**

# Organization Background

**Name of Charitable Organization:** Horizons of Friendship

**Address of Charitable Organization*:*** 50 Covert Street, P.O. Box 402, Cobourg, Ontario K9A 4L1

**Charitable Registration Number:** 11896 3461 RR0001

**Executive Director**: Patricia Rebolledo, 1.905.372.5483 ext. 11 or prebolledo@horizons.ca

**Key Contact**: Ellen Meadd, Resource Development Officer, 1.905.372.5483 Ext. 13 or e.meadd@horizons.ca

**Horizons of Friendship (Horizons)** is a Charitable Canadian organization based in Cobourg, Ontario committed to addressing the root causes of poverty and injustice through the cooperation of people from the South and the North. It was founded in 1973 and has grown from a small group of concerned citizens from rural Ontario into a nationally recognized and respected non-governmental organization. Working directly with community-based partner organizations, it provides financial and technical support, education and training, and resources, with the goal of empowering local people to lead projects that address needs in their communities and make transformative social and economic change possible on a big scale.

A firm believer in the adage that change starts at home, **Horizons** supports work in the field by building awareness in Canada, connecting and engaging citizens young and old, and fostering solidarity. In 46 years, ithas worked with over 130 partners to successfully implement more than 1,300 projects, including multi-year projects with the support of the Canadian government**.** Its current international programming supports the work of 11 partners and 18 projects in Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama, encourages sustained impacts at community, provincial, national, and regional levels, and is focused on pressing themes, including Indigenous & Afro-Descendant Rights and Violence Against Women.

# Partner Organization

**The Asociación de Mujeres Indígenas de la Costa Atlántica de Nicaragua** **(AMICA)** is an Indigenous organization headed by Indigenous women. It was established in the 1980s to improve the social and economic conditions of women living in remote communities on the North Atlantic Coast of Nicaragua. One of the first civil-society organizations to emerge in this area and to focus on women, AMICA's vision is of a future in which marginalized Indigenous Miskitu women are empowered to assume leading roles in the development of their families and communities. Towards these ends, one of their primary objectives is to address the high levels of gender-based violence experienced by Indigenous women on the North Atlantic Coast. Horizons has partnered with AMICA since 2008 to support Indigenous women through education on health, violence, and gender equality. Improving

agricultural livelihoods has been a complementary focus.

AMICA works to increase awareness of violence against women and of sexual reproduction and health rights (SRHR) among the Indigenous communities of Nicaragua's North Atlantic Coast, responding to a needs assessment conducted in the community, which indicated there was a need for reliable information on SRHR and increased efforts to protect women from gender-based violence. AMICA has scaled-up its educational efforts to compensate for the inadequate support currently available for young people from educational institutions, community leaders, and government authorities.

# Recap of Community Need

Nicaragua is one of the poorest countries in Latin America and the Caribbean, has had a long history of civil war, and is currently experiencing an ongoing human rights crisis that erupted in 2018. With a high poverty rate (i.e., 30% in 2014) extreme poverty sitting at 8%, and a GDP second only to Haiti’s, the country struggles with low and unequally distributed access to basic services such as electricity, water, and sanitation, and issues such as access to education, low secondary school completion rates, and rates of teenage pregnancy which are particularly high amongst Indigenous women on the Caribbean coast (World Bank, 2017).

Being female in Nicaragua means living in a constant situation of violence, discrimination, and poverty. This is especially the case for Indigenous women living in the autonomous regions of the Caribbean Coast where this project is being implemented. Gender-based violence against women has risen country-wide in recent years to become one of the main security problems for this sector of the population in which 9 of every 10 women has experienced some type of violence before the age of 15 (IEEPP,[[1]](#footnote-1) 2017). Femicide, the worst form of violence against women, is also high country-wide and highest along the Caribbean Coast. Although Nicaragua has a legal framework favourable to women's rights, there is a gap between what is established in law and what is enforced. This gap is visible in the absence of access to loans, justice institutions that refuse to recognize women and the civil society organizations that defend them, and a local citizenry that prioritizes economic problems over tackling systemic institutional problems which enable discrimination, poverty, and other factors.

Studies have established a strong link between gender-based violence and women’s poverty rates and the inability to exercise their rights. Nicaraguan women are almost twice as likely than men to be underemployed, and this gap is more pronounced in rural areas. Land, even marital property, still tends to be registered to men. Women who want to start businesses have few opportunities to access credit, particularly on the Caribbean Coast. A woman’s chances for economic security are further limited by early and frequent childbirth. On the Caribbean Coast, 22% of women have their first pregnancy before the age of 15 and Indigenous women have an average of 5 to 8 children.

The current response to COVID-19 has left the autonomous regions of the Caribbean coast in a difficult situation. The national government chose not to establish any type of quarantine measures, even in response to the World Health Organization Director General’s urgings to governments around the world on March 11, 2020 to take aggressive action to stop the virus from spreading. Instead, there has been continued promotion during the pandemic of tourism and mass gatherings such as sports events and church services as well as political messaging that claimed the virus is nothing more than a hoax, while people are dying without access to testing or medical aid. Reliable information about COVID-19 and its spread was not provided to communities. Claims were made in the early days of the disease that Cuba already had a cure in hand, and this messaging has been linked by some to a delay in the adoption of protective behaviours by the population and increased infection. The Nicaraguan Ministry of Health (MINSA) has reported a modest number of confirmed infections and deaths related to COVID-19, i.e., 4,311 and 133 respectively on August 21st. However, the COVID-19 Citizen Observatory, a watchdog group of medical professionals and others in the country, has been quick to challenge these official numbers and claim that actual infections are much higher. Claims from Nicaraguan physicians on the dire conditions in the country’s hospitals have been reported by media, i.e., no preventative, containment or mitigation actions are being used to stop the spread.

It is particularly challenging to get aid to the remote communities of the North Atlantic Autonomous Region on the Caribbean coast where our project is being implemented. Without support to provide advice about managing COVID-19 to communities in this region of the country, our local partner, the **Asociación de Mujeres Indígenas de la Costa Atlántica de Nicaragua** (**AMICA)** has stepped in to help. Project activities have been altered to reflect this, as described below. AMICA is providing information about voluntary quarantine and social distancing measures and ensuring that the most vulnerable in these communities have the support they need. They set up a plan to help communities recover lost crops, procured and distributed hygiene items to families, and stepped-up their work with traditional authorities to support survivors of sexual and domestic violence. Gender-based violence has spiked in Central American countries during the pandemic; in fact, many refer to this as a second pandemic. We continue to watch this situation. While we do not have reliable statistics on it for Nicaragua just yet, we do know that the incidence has increased by 70% in neighbouring El Salvador, and we expect it is also severe in Nicaragua.

The project aims to improve, strengthen, and continue the advocacy work of AMICA on the Caribbean coast of Nicaragua to address the situation of violence and discrimination against women, contribute to the fulfillment of women’s human rights, and improve the capacity of women, especially Indigenous women, to promote their right to live free of violence and with access to justice.

# Review of Project Summary

**Title:** *“Educating women and girls in Nicaragua’s Indigenous region to defend their rights and address violence against women”*

**Partner:** Asociación de Mujeres Indígenas de la Costa Atlántica de Nicaragua (AMICA)

**Location:** The project will be implemented in the Autonomous Region of the North Atlantic Coast (RACCN), within the Municipalities of Puerto Cabezas and Waspam

**Beneficiaries:** Direct beneficiaries include **1,544** women and youth in 12 Indigenous communities, and **300** more who will be provided with hygiene items to respond to COVID-19. Indirect beneficiaries include **11,064** community members in the two municipalities.

**Project Duration:** December 2019 to May 2021

**Project Budget: $76,992 CDN** over 18 months of which **$250 was received from the Rotary Club of Brighton**

The *“Educating women and girls in Nicaragua’s Indigenous region to defend their rights and address violence against women”* project is being implemented by **Horizons of Friendship (Horizons)** in partnership with Nicaraguan executing agency the **Association of Indigenous Women of the Atlantic Coast of Nicaragua (AMICA)**.

**The project’s long-term goal is to contribute to the fulfillment of women’s human rights by addressing violence against women and working to eliminate all forms of violence and discrimination against them. It builds on the previous work of AMICA to support women to take on leadership roles in their families and communities and strengthen the local organizations that defend women. This project is designed in collaboration with women in the beneficiary communities of Waspam and Puerto Cabezas and responds to community needs which were described earlier. To meet these community needs, AMICA has begun scaling-up its educational efforts to compensate for the inadequate support currently available for young people from local educational institutions, community leaders, and government authorities.**

**One of the key goals of this project is to protect the women who voluntarily defend victims of violence. Another is to support women by helping to improve their access to resources and property, by implementing business ventures that build economic independence for women and their children. A third is to provide outreach to adolescents and youth from Indigenous communities to address the issue of early pregnancy and raise awareness to reduce it, in coordination with local health, community and territorial authorities, and religious leaders. A final goal of the project is to build strong, collaborative relationships with public justice institutions to ensure that justice is available for all victims of violence.**

**In addition, as noted earlier, this project is responding to the recent COVID-19 pandemic and the lack of support and reliable information made available to participating communities by official agencies. AMICA has amended the project budget to allow for the modest provision to these communities of hygiene materials, information sheets, and workshops dedicated to the prevention and mitigation of the disease.**

# Summary of Interim Project Activities and Key Achievements (and in each key component of the project)

With the **Rotary Club of Brighton’s** generous support, **AMICA** built upon past work that was supported by **Horizons** and began implementing this project on the Caribbean coast of Nicaragua; that is, with 1,844 women, men, youth, and children in the Municipalities of Puerto Cabezas and Waspam, including 300 additional individuals who will be provided with COVID-19-related training and supplies. An additional 11,064 people in these communities will benefit indirectly as a result of the project’s strengthened advocacy capacities for women, especially Indigenous women, to address the situation of violence and discrimination in which they live and support them in developing skills to access their rights and build economic independence.

In the first six months of implementation of the project, the following achievements have been made:

* 30 Indigenous women were selected to serve as volunteer defenders for victims of violence and will receive training in the coming months.
* A protocol document on Action in the case of Violence Cases was prepared to support volunteer defenders.
* More than 32 women victims of violence were accompanied to court to promote their rights before government authorities.
* 32 individuals were provided with personalized legal consultations.
* 478 people were provided with personalized family planning counselling services.
* Work advanced to update information on the work of guarantor institutions in the implementation of justice in the 12 communities being served.
* 2,076 people out of a target of 6,468 in the 12 communities have developed knowledge of the issue of gender-based violence.
* 740 adolescents and young people received workshop training on family planning.
* 501 young people and adolescents received workshop training on sexual and reproductive health.
* 300 people in 12 Indigenous communities received hygiene products (soap, bleach, and masks) to help them stay safe during the COVID-19 pandemic.
* Reliable information about COVID-19 was produced in Miskitu (the Indigenous language in the municipalities) and Spanish and disseminated.
* Two informative talks on COVID-19 were prepared. These will be provided in the coming months to each community and each ward in the two municipalities.

Specific progress against the expected project results is detailed below.

**Result #1: Strengthen the organizational, technical and methodological capacities of voluntary defenders to manage compliance with the legal framework for their rights, especially to live violence-free and to have access to productive assets**

* AMICA selected 30 Indigenous women to serve as volunteer defenders for victims of violence. All the communities in the Municipalities of Puerto Cabezas and Waspam are represented in this selection. AMICA is now preparing to train these 30 volunteer defenders in the coming months, i.e., in order to strengthen their management capacities for the promotion of women's rights.
* A protocol document on Action in the case of Violence Cases was prepared and is available for distribution. This document includes sections on (1) how to provide basic psycho-social care to victims of violence, (2) the use and implementation of self-support mechanisms and procedures, and (3) the use and implementation of The Defender Protection Strategy for volunteer defenders.
* AMICA is promoting collaboration with other social organizations working on behalf of women, to strengthen coordination to improve their collective capacity to address gender-based violence and women’s empowerment. Meetings attended with partner organizations over the reporting period include:
1. A conference to commemorate International Women’s Day in March 2020—topics included themes of violence towards women and repudiation against the death of women in the autonomous region as well as nationally. Partners at this event included territorial civil society organizations.
2. A meeting held in February 2020 with AMICA, Nidia White, and World Vision organizations to discuss the work of the Network of Violence Against Women.
3. A meeting held in March 2020 with the Gender Bureau (MEG) member organizations to discuss a variety of topics related to the work of the Gender Bureau.

*Testimonial 1:*

I feel fortunate to belong to the Community Network against violence in my community. For six years, I have been a beneficiary of AMICA’s activities within the community of France Sirpi in the Tasba Raya sector of Waspam, Nicaragua, where I live. I have taken part in activities to strengthen my knowledge through workshops, talks, and forums on women’s rights issues and advocacy and have benefitted from working with community leaders. I survived domestic violence and now accompany other sisters in my community who are experiencing violence, in hope that violence can be prevented in the future.

AMICA knowledgeably supported me regarding violence against women, food production and food security, providing Creole seeds for crops like rice, beans, and corn, as well as tomatoes, chiltoma, onion, and pipián, amongst others. They gave us double the seeds that we needed each year so that we could distribute them to others who needed them.

AMICA has taught us about permaculture and given us loans to support our small businesses. We are pleased with the work of AMICA, Horizons of Friendship, and Diakonía. They have changed my life and now I can support other women in my community to do the same.

**Esmeralda Horacio López, 37 years old**

**Project participant**

**Result #2: Women - adults, adolescents, and youth - of the municipalities of Waspam and Puerto Cabezas will be enabled to work towards the effective implementation of laws, national regulations and international conventions in favour of women's rights and especially the elimination of all forms of violence and discrimination before institutional and community authorities**

* More than 32 women victims of violence were accompanied to court to promote their rights before government authorities, especially their right to live without violence and with open access to justice. This action achieved a total of 21 successful cases (17 civil cases and 15 criminal cases). AMICA accomplished this through partnering with a legal advisory services organization. Cases included intimidation and threat, psychological and physical violence, attempted murder, and child abuse.
* In addition, legal advisory services fielded 32 inquiries and provided legal consultations related to 14 civil cases (e.g., distribution of marital property on dissolution of marriage), 8 criminal cases (e.g., threats and sexual assault), and 3 cases of domestic violence, all perpetrated against women.
* 478 people, including 321 women and 157 men, were provided with family planning counselling services.
* Work is underway to update information on the work of guarantor institutions in the implementation of justice in the 12 communities being served.
* Work is underway to improve the awareness of public authorities and the general public about the situation of violence against women in Nicaragua. To date, 2,076 people in the 12 communities out of a target of 6,468 have developed knowledge of gender-based violence.
* 740 adolescents and young people were provided with workshop training on family planning, including 577 girls and young women and 163 boys and young men.
* 501 young people and adolescents have been trained in sexual and reproductive health; however, these workshops have now stopped because of COVID-19, slowing further advancement towards project training goals during this reporting period. When it is safe to do so, workshops are expected to resume.

*Testimonial 2:*

“May our bodies, our intimacy, and our personal history be respected.”

 **Youth participant**

 **Family planning workshops**

**Result #3: Improved access to productive assets and resources for women on the Caribbean coast – especially Indigenous –in the municipalities of Waspam and Puerto Cabezas.**

* The implementation and support of women-led economic ventures was delayed due to the local emergency response to COVID-19 that was necessary to support public health over the last few months. Nevertheless, seven joint economic ventures were supported over the reporting period, reaching 24 women. In the next months, AMICA focus on making progress on the implementation of 7 new economic ventures.

**Result #4: Support indigenous communities in prevention and mitigation of COVID-19 (Please note: this project result is NEW)**

* Hygiene products (soap, bleach, and masks) were provided to 12 Indigenous communities in two municipalities, directly benefiting 300 Indigenous people.
* Informative materials about COVID-19 were produced and disseminated in Miskitu (the Indigenous language in the municipalities) and Spanish.
* Two informative talks on observing social distancing principles and best practices were prepared and will be rolled-out to each participating community and ward.

# Monitoring, Evaluation and Reporting

Horizons has strong monitoring and evaluation practices and policies, regularly collaborating with partners and beneficiaries to ensure accountability. Results Based Management (RBM) methodology and environmental and gender assessments are used to approve and oversee all projects. Independent external evaluations complement this process, as well as administrative and accounting reviews and periodic external audits. Horizons has strong institutional policies on gender equality, environmental sustainability, and anti-corruption. Quarterly financial and semi-annual narrative reports that track progress and achievements at various stages of the project, based on the outcomes listed above, will be submitted by our partner **Asociación de Mujeres Indígenas de la Costa Atlántica de Nicaragua** **(AMICA)** and will be reviewed by our program team. Regular contact via email, phone, and Skype ensures that Horizons can respond rapidly to issues and needs as they arise. Our Program Financial Officer will perform additional monitoring to ensure that project funds are used solely for stated purposes and that partners get the support they need to maintain satisfactory financial and administrative systems and procedures. This entails annual visits to partners, where possible, to conduct audits, reviews, and special training sessions.

Horizons’ Executive Director has 35 years of experience overseeing development programs in Central America and Mexico and is well-versed in identifying and responding to programming opportunities and risks in the region. The Program Financial Officer is a trained accountant with 16 years of experience as an administrator in Costa Rica and 18 years with Horizons overseeing partner financial systems and reporting. Program staff members are trained and experienced in RBM. All Meso-American programming staff at Horizons are fluent in Spanish and English, facilitating understanding with partners.

1. **Challenges**

The last five months of the COVID-19 pandemic have been particularly challenging for the communities of Puerto Cabezas and Waspam. It is always difficult to get aid to these remote communities. As such, little support has been provided over the reporting period in terms of either resources or information by MINSA, i.e., to help control the spread of the disease and to support those who are infected to recover. The level of poverty in this area leaves people with no alternative but to go out each day and look for work to help feed their families. This has put additional pressure on attempts to curb the spread of the disease.

At the time of writing, the local hospital was overwhelmed with infected patients, and many were being turned away to recover at home. The Indigenous population was treating this disease with traditional methods, as best they could, i.e., vaporizing traditional medicines to help ease breathing and administering homemade teas. AMICA, as noted earlier, stepped in to distribute reliable information on reducing the spread of the disease and hygiene supplies such as masks, disinfectant, and handwashing supplies. Many in the participating communities were doing their best to self-isolate, where possible.

Despite these challenges, AMICA has been struck by the courage and level of effort shown by the beneficiaries of the project, who have maintained their work of accompanying and defending victims of violence, including women, children, adolescents, and young people, despite their fears around personal safety related to COVID-19. These beneficiaries and defenders continue to monitor and show interest in continuing the project. Adaptability during this pandemic has been the key to success so far. AMICA has continually searched for new ways of working to achieve the project goals and methodologies to deliver programming that keep public safety top of mind. Most communications amongst AMICA, community members, and organizations have moved from in-person to remote methods and project budgets and results have been optimized to reflect the new and ever-changing environment of challenges and opportunities presented by the progression of COVID-19.

# Financial Report

Despite the inevitable slowing in progress caused by the COVID-19 pandemic, the project has greatly advanced towards its goals over the reporting period. Social distancing resulted in expenditures that were lower than expected over the last six months in some categories, i.e., contracting local consultants, delivering SRHR workshops and publications, and transportation. However, expenditures were on track for many other tasks, e.g., those related to providing reliable information to communities on how to protect themselves from the disease and distributing products to help them do so, such as bleach, masks, soap, and so on. We are confident that workshops on SRHR for adolescents and youth will resume as soon as it is safe to do so.

# DETAILED BUDGET BREAKDOWN

|  |  |  |  |
| --- | --- | --- | --- |
| **PROJECT EXPENSES - Two years (December 2019 to May 2021)** | **Total Expenses Budgeted $CDN\*** | **\*\*Expenses Dec. 1, 2019 to June 30, 2020** | **Balance Remaining** |
| **Project Coordination & Staff Costs** | **$27,588** | **$11,027** | **$16,561** |
| Project Coordinator | 10,724 | 4,645 | 6,079 |
| Administrator | 8,151 | 3,530 | 4,621 |
| Resources to support 18-months for care in cases of violence | 8,713 | 2,852 | 5,861 |
| **Contracting Local Consultants** | **$9,170** | **$2,359** | **$6,811** |
| Two meetings to design Self-help Manual for Women Defenders | 2,126 | -- | 2,126 |
| Two meetings to develop the Strategy for the Protection of Women Defenders | 1,063 | -- | 1,063 |
| Training for women defenders on relevant topics (Action Protocol / psychosocial) | 1,329 | 1,362 | (33) |
| Diagnostic support, e.g., challenges with government institutions, justice officials’ response towards victims, and so on. | 1,594 | 727 | 867 |
| Communication and awareness campaign on gender-based violence | 930 | -- | 930 |
| Celebration of commemorative dates for women’s rights and against violence | 1,064 | 270 | 794 |
| Producing and disseminating material on COVID-19 | 400 | -- | 400 |
| Project Auditing | 664 | -- | 664 |
| **Hygiene Materials for the prevention of COVID-19**  | **$1,933** | **--** | **$1,933** |
| Purchase of Masks, soap, and other cleaning products to be distributed to 300 Indigenous peoples | 1,933 | -- | 1,933 |
| **Materials for workshops and publications** | **$10,041** | **$677** | **$9,364** |
| Producing self-help manual for volunteer advocates | 1,063 | -- | 1,063 |
| Workshop for development of strategy for protection of defenders | 1,329 | -- | 1,329 |
| Workshop for training women defenders on use and application of self-help procedures | 1,329 | -- | 1,329 |
| Workshop for building alliances and establishing network of volunteer defenders | 1,196 | -- | 1,196 |
| Promotion of early pregnancy training / processes for 1,000 adolescents / youth (both sexes) | 1,200 | -- | 1,200 |
| Promotion of age / circumstance-appropriate contraceptive methods | 1,063 | 677 | 386 |
| Technical assistance for new and established economic ventures (accounting / presentation) | 2,462 | -- | 2,462 |
| Information sessions on COVID-19: Prevention and Mitigation | 399 | -- | 399 |
| **Transportation and Travel Expenses and Other** | **$11,929** | **$1,875** | **$10,054** |
| Travel expenses for presenting project to communal and territorial authorities | 930 | 544 | 386 |
| Transportation for strategy development workshop | 797 | -- | 797 |
| Travel for training women defenders  | 1,329  | -- | 1,329 |
| Transportation to bring together local organizations to build alliances and establish networks | 531 | -- | 531 |
| Support and accompaniment of victims of violence | 1,594 | 672 | 922 |
| Transportation to bring together 1,000 adolescents and youth of both sexes to address early pregnancy | 1,594 | -- | 1,594 |
| Travel to various sites to help Indigenous women gain access to economic ventures  | 2,591 | -- | 2,591 |
| Travel to 12 communities to provide hygiene kits, and disseminate information on COVID-19 | 531 | -- | 531 |
| Field visit to monitor and follow-up of intervention communities | 571 | -- | 571 |
| Transportation rental (2 trips 1st year / 1 trip 2nd year) | 1,461 | 659 | 802 |
| **Office and Communications** | **$11,935** | **$5,916** | **$6,019** |
| Office supplies, stationery | 1,107 | 471 | 636 |
| Telephone, power, and internet payment | 1,262 | 662 | 600 |
| Contribution for the venue (infrastructure and furniture) | 9,566 | 4,783 | 4,783 |
| **Monitoring and Evaluation** | **$4,396** | **$2,198** | **$2,198** |
| **TOTAL PROJECT EXPENSES** | **$76,992** | **$24,052** | **$52,940** |

|  |  |
| --- | --- |
| **PROJECT REVENUES – Two Year Project (December 2019 to May 2021)** |  |
| Partner Contribution from AMICA *(received)\*\** | $26,572 |
| Horizons of Friendship *(committed)\*\*\** | $1,396 |
| Scarboro Missions (received) | $20,000 |
| **Rotary Club of Brighton** | **$250** |
| Horizons of Friendship and Institutional Donors *(pending to fundraise)* | $28,774 |
| **Total Projects Revenue** | **$76,992** |

\*This budget is in Canadian dollars and was converted from US dollars at an exchange rate of 1.3286 (Nov. 21, 2019). \*\*The contribution from our partner includes both in-kind and financial support to help with project coordination, transportation, and communication services. \*\*\*This represents an in-kind contribution of Horizons staff time and other resources to monitor and support the implementation of the project, build the institutional capacity of AMICA, and ensure the sustainability of their work.

1. IEEPP stands for the Institute of Strategic Studies and Public Policies. [↑](#footnote-ref-1)