PROGRAMME COMMITTEE

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Progress on efforts for the eradication of Peste des Petits Ruminants (PPR)

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## EXECUTIVE SUMMARY

- The *Peste des Petits Ruminants* Global Eradication Programme (PPR-GEP) has achieved tangible results.
- The 163rd Session of the Council requested that progress on the global efforts to eradicate PPR be considered at the 128th Session of the Programme Committee in May 2020. (CL 163/REP para. 10.f).
- Out of 198 countries to be recognized as PPR free by 2030, 57 are already clear according to the World Organisation for Animal Health (OIE) official requirements, 67 are infected, and 74 have never reported PPR. Those infected are at different stages of the accreditation process.
- In several countries, surveillance and vaccination campaigns have reduced the disease incidence considerably.
- USD 996 million is required for the first phase of the PPR GEP (2017-2021) and, although resource mobilisation is ongoing, the funding gap is estimated to be USD 340 million.
- More advocacy and investment is required from all partners for the period 2022-2030.
- A resolution on the PPR GEP will be submitted to the Committee on Agriculture (COAG) and to the 129th Session of the Programme Committee in November 2020.

## GUIDANCE SOUGHT FROM THE PROGRAMME COMMITTEE

- The Programme Committee is invited to provide guidance and consider the establishment of a dedicated trust fund from voluntary contributions.

**Draft Advice**

*The Committee:*

- noted the progress on efforts to eradicate PPR;
- encouraged the Secretariat to reach out to Members especially those from infected countries as well as other Non-State Actors to commit and invest more resources towards PPR eradication by 2030.
I. Introduction

1. Livestock plays a major role in world agriculture and represents approximately 43 percent of agriculture’s contribution to national gross domestic product (GDP) as a global average. The important role livestock will continue to play in the coming decades is due to the transformation in the world food economy and the increasing demand for quality nutritious products from animal sources (meat, eggs, and dairy). This is primarily due to increases in income, urbanization, and population growth. An estimated 75 percent of the world’s 1.2 billion extremely poor (less than USD 1 per day) people live in rural areas and derive a significant part of their income from agriculture and/or agricultural related activities (World Development Report: Agriculture for Development, 2008). Therefore, FAO’s efforts towards good governance and health of agriculture is critical to make progress in poverty reduction, good nutrition, and hunger elimination.

2. Small ruminant systems often have a dual purpose in that they supply home family consumption and are part of the household income security portfolio. In most smallholder systems, there will be a certain take-up for personal and household consumption. This is especially the case with milk but at times also with live animals. Due to their sizes, goats and sheep can be sold easily and, in non-cash economies, bartered for other crop products such as cereals.

II. Peste des Petits Ruminants - impacts negatively on livelihoods and Sustainable Development Goals

3. Peste des Petits Ruminants (PPR) is a highly contagious and devastating disease, affecting sheep and goats in around 70 countries across Asia, Europe, the Near East, and Africa since its first appearance in 1942. More than 80% of the global 2.5 billion (FAOSTAT, 2020) small ruminant population is at risk of PPR in infected countries. PPR is caused by a virus similar to rinderpest that was globally declared eradicated in June 2011 at the 37th Session of the FAO Conference. PPR is a high economic impact disease, not only causing high economic losses, but also adversely affecting livelihoods, which exacerbates poverty, food insecurity and malnutrition. Over 330 million smallholder farmers are particularly vulnerable to the consequences of the disease as it threatens their livelihoods and survival.

4. Food insecurity can be a direct consequence of PPR. Small ruminants play an important role in recovery from disaster, emergencies, as they are quick to sell or to re-stock in post-crisis situations. Small ruminant husbandry is often a mechanism for income smoothing, thereby providing a more resilient food supply system for the household. The Kenya outbreak in 2007 resulted in small ruminant owners foraging for food which, consequently, is indicative of the grave food insecurity. Research in Kenya demonstrated that, amongst 459 farmers, income from small ruminants was used as follows: school fees (32%), purchase of food (22%), farm investment (18%), medical expenses (10%), off-farm investment (9%), social activities (5%), and re-stocking (4%).

5. There are also other indirect losses due to PPR such as a reduction of animal productivity or costs associated with animal treatment. Farmers in Ethiopia reported that the reduction in milk production directly affected the nutrition of children. In some cases, lack of resources can lead to children dropping out of school. Less, but still important, is the reduction of weeding and production of manure provided by small ruminants. The global PPR economic impact is estimated at approximately USD 1.5 to USD 2.1 billion per year. It is observed that when a herd diminishes due to PPR, it fails to reproduce and becomes unsustainable. This means that the producer will either have to secure a loan to set up a new herd or transition to other livelihood sustaining activities, notwithstanding the limited resources available to invest in such new ventures.

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1 Livestock in the balance. SOFA, FAO 2009. In some PPR infected or at risk countries this can surpass 85 percent
6. PPR global eradication by 2030 will contribute to the achievement of the UN Sustainable Development Goals (SDGs), in particular SDG1 – No Poverty; SDG2 – Zero Hunger; SDG3 – Good health and well-being; SDG5 – Gender Equality; SDG8 – Decent Work and Economic Growth; SDG12 – Responsible consumption and production; SDG15 – Life on land; and SDG17 – Partnership for the goals.

III. Status of PPR GEP implementation

A. Management

7. The PPR GEP management includes the FAO/OIE Secretariat and the PPR Advisory Committee, established in April 2016 and June 2017 respectively, and the PPR Global Research and Expertise Network (PPR GREN). Furthermore, the group of Rome-based UN Agencies Permanent Representatives Friends of PPR GEP was created in 2018 (“Friends of PPR Eradication”).

8. At the margins of the 42nd Session of IFAD’s Governing Council, in February 2019, FAO and OIE, with the support of IFAD and of the Group of Friends of PPR Eradication, organized a side-event. During this event, IFAD called for the establishment of a tripartite partnership between FAO/OIE/IFAD for moving forward the PPR GEP agenda toward 2030.

9. The 125th Session of the Programme Committee, in November 2018, addressed the issue under Item 7 “Report on the outcome of the pledging conference on the eradication of Peste des Petits Ruminants” (7 September 2018, Brussels, Belgium - PC 125/7) and requested FAO to organize a meeting dedicated to PPR GEP for all Permanent Representatives, in collaboration with the Group of “Friends of PPR Eradication” to support funding needed to finance priority actions of the PPR GEP.

10. The Permanent Representative of the Republic of Côte d’Ivoire to FAO, IFAD and WFP in Rome, Italy, as Coordinator of the Group of “Friends of PPR Eradication”, organized two meetings on 3 and 4 October 2019:

   a) the first meeting was held on 3 October 2019 with the participation of Mr QU Dongyu, FAO Director-General. The Coordinator of the Group was accompanied by the Chairpersons of the FAO Regional Groups (Delegation of the European Union, President of the Africa Regional Group and Vice President of the Middle East Regional Group). As outcome of the meeting, it was agreed that:

      i. FAO retains leadership in the fight against PPR;
      ii. there is a need for coordination between Rome, the Regional Economic Communities, and the countries;
      iii. more advocacy is needed for the political commitment by Member Nations and to invest national resources towards PPR eradication;
      iv. collect statistical information and indicators to monitor progress on the implementation of the programme, and
      v. the introduction of incentives parameters with particular emphasis on monitoring the implementation of field activities instead of organizing meetings.

   b) the second meeting, on 4 October 2019, was an Information meeting for the Permanent Representatives. It highlighted the following recommendations:

      the Group of “Friends of PPR Eradication” to:

      i. continue raising awareness on the basis of the suggested action plan;
      ii. strengthen collaboration with regional groups of the Rome based Agencies, and
      iii. invest more resources through the establishment of a global fund for the eradication of PPR by 2030 based on experience of the Green Climate Fund and migration funds.
the FAO/OIE Secretariat to:

iv. continue sensitization and advocacy to further reduce the gap and for more resources to reach the 2030 goal of the world free of PPR,

v. identify incentives parameters and prioritize field activities (awareness raising, surveillance, risk-based prioritization of vaccination over the next 3 years, capacity building, research, among many others) and minimize organizing of meetings;

vi. while respecting the mandate of each institution, ensure coordination at the global, regional, sub-regional and country levels as well as among all the partners;

vii. maintain or even strengthen national efforts and create focal points for PPR GEP in each country;

viii. use each event to present the progress of the programme implementation; and

ix. strengthen coordination between the FAO Representative in each country, the Ministers (Agriculture/Livestock and Economy/Finance), civil society and other partners so that PPR is a priority in the Country Programming Framework (CPF).

c) furthermore, the group of Friends of PPR Eradication facilitated the meeting with the Vice-President of the African Development Bank that led to the preparation of a project from ECOWAS for a total of USD 200 million to support PPR control in West Africa.

11. The PPR Advisory Committee aims to provide strategic guidance for the programme implementation and ensure effective oversight. Three meetings have been organized. Members of this Committee are from: i) Steering and Management Committees of the Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TAD) at global and regional levels; ii) Regional intergovernmental organizations (i.e. Arab Organization for Agricultural Development (AOAD), the African Union's Inter-African Bureau for Animal Resources (AU-IBAR), Association of Southeast Asian Nations (ASEAN), Economic Cooperation Organization (ECO), Gulf Cooperation Council (GCC), South Asian Association for Regional Cooperation (SAARC); iii) Funding partners and foundations (European Union, World Bank, Bill and Melinda Gates Foundation (BMGF), Asian Development Bank, Africa Development Bank, Islamic Development Bank, Qatar foundation); iv) Representative of civil society organizations, farmers/pastoralists, non-governmental organizations, International Goat Association; and v) Technical institutions, the International Atomic Energy Agency (IAEA), International Livestock Research Institute (ILRI), United States Agency for International Development (USAID), United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA/APHIS), International Development Research Centre (IDRC), Global Alliance for Livestock Veterinary Medicines (GALVmed); and vi) FAO and World Organization for Animal Health (OIE) Representatives.

12. The PPR Global Research and Expertise Network (PPR GREN) aims to build strong partnerships between researchers and technical bodies, regional organizations and well-recognized experts and development partners. Two annual meetings have been organized. The members of the PPR GREN constitute about 350 researchers worldwide divided according to four thematic areas: i) PPR epidemiology including socio-economic factors and the livestock-wildlife interface; ii) PPR diagnostics; iii) PPR vaccine and delivery and iv) outreach, advocacy and communication in order to facilitate awareness raising, resource mobilization, and both local and national participation in PPR eradication programme(s).

13. From 2015 to 2020, several researches were carried out and a total of 283 peer-reviewed scientific articles were published as followed: 2015 (29), 2016 (50), 2017 (48), 2018 (59), 2019 (80), and as of March 2020 (17). Findings of these researches will be used to guide PPR GEP implementation.

14. A global fund for the eradication of PPR by 2030, based on experience of the Green Climate Fund and migration funds, will be established in the coming months, initiating with funds from France, EU, and USA.
B. Partnerships

15. FAO and OIE have developed partnerships with global and regional organizations, the African Union–Inter-African Bureau for Animal Resources (AU-IBAR), the African Union Pan African Veterinary Vaccine Centre (AU-PANVAC), and Regional Economic Communities as well as with relevant civil society organizations.

16. In order to address PPR incursion into the endangered Saiga population and elsewhere around the world, FAO and OIE organized, in collaboration with the Wildlife Conservation Society (WCS) and Royal Veterinary College (RVC), a workshop on Controlling PPR at the livestock/wildlife interface in Rome, March 2019. As an outcome of this meeting, donors showed interest which resulted in two projects being funded to address PPR at the livestock/wildlife interface.

17. Meetings of PPR vaccine manufacturers have been held every two years since 2014. During these meetings, challenges for PPR vaccine production are identified and subsequently addressed. As a result, the quality of vaccines has improved, the unit cost per vaccine dropped from USD 0.1 in 2015 to USD 0.04 today. One of the major challenges identified was the quality of the vaccines to be delivered in remote areas, and the need for maintaining the cold chain during vaccination in high temperature. In December 2017, the PPR Secretariat organized a workshop on thermostolerant PPR vaccines with funding from GALVmed. The workshop reviewed the current research on thermostolerant PPR vaccines, discussed the parameters for defining thermostolerance Standard Operating Procedures (SOPs), developed by AU-PANVAC, and explored modalities for the development/production of thermostolerant PPR vaccines. Currently several laboratories are producing the thermostolerant vaccines, although FAO and PANVAC are still finalizing the SOPs.

18. Consolidation of the strategic partnership with OIE and several other global and regional institutions (IAEA, ILRI, the French Agricultural Research Centre for International Development (CIRAD), Wildlife Conservation Society, Royal Veterinary College), as well as resource partners, research institutions, and Civil Society Organisation is required.

C. Regional strategies and National strategic plans

19. PPR infected-countries are found in nine regions throughout Africa, Asia, the Middle East and Europe. FAO, OIE and partners (ASEAN, Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), ECO, Intergovernmental Authority on Development (IGAD), SAARC, South African Development Community (SADC), Arab Maghreb Union (UMA) are providing support to countries and regions to formulate their PPR National and Regional Strategic Plans, which detail the steps for assessing, controlling, and eradicating PPR, maintaining PPR freedom, as well as the financial resources required and committed by national and regional authorities to implement the plans. In line with the PPR global strategy, eight of the nine targeted regional economic communities were assisted to formulate and endorse their PPR regional strategies. At national level, out of the 79 infected and at risk countries, 68 were assisted to formulate their costed PPR National Strategic Plans (PPR NSP). From the eight formulated regional strategies, only two (ECOWAS and IGAD) have been endorsed by their constituencies. In addition, the 68 NSP formulated are in alignment with the regional and global strategy. The formal endorsement of NSP by national authorities and the integration of PPR into existing agriculture sector programmes and activities are essential to make more national budgets available for the PPR eradication programme.

D. Road map meetings: assessment of programme implementation

20. Globally, there are 198 countries to be recognized as PPR free by 2030, 57 are already clear (official recognition according to the OIE standards), 67 are infected and 74 have not reported PPR. Of the 74 countries, 12 are at risk of PPR infection. Therefore, the programme’s target are those 79 at

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*4 Arab Maghreb Union; Arab Organization for Agriculture Development; Association of Southeast Asian Nations; Economic Community of Central African States; Economic Cooperation Organization; Economic Community of West African States; Gulf Cooperation Council; Intergovernmental Authority for Development; South Asian Association for Regional Cooperation; Southern African Development Community.*
risk and infected countries which need support to become freed of disease, although countries at risk (remaining 62) should also be assisted for freedom of disease on the historical basis.

21. The overarching PPR global control and eradication strategy (PPR GCES) is based on four stages. These four stages combine decreasing levels of epidemiological risk with increasing levels of prevention and control. Stage 1, the epidemiological situation is assessed. Stage 2, control activities including vaccination are implemented. Stage 3, PPR is eradicated. Stage 4, vaccination must be suspended; the country must provide evidence that no virus is circulating at zonal or national level and that it is ready to apply for official OIE PPR-free status.

22. PPR regional roadmap meetings have been organized in all of these nine regions. The first round of meetings provided the opportunity to present the PPR GCES and its tools; carry out a first self-assessment of each country’s situation regarding PPR and the capacity of its veterinary services to control the disease; and develop a regional roadmap for the region and obtain countries’ engagement for its implementation. The meetings also served to identify other small ruminant diseases that could be controlled together with PPR and setup the Regional Advisory Group (RAG). RAG aims to oversee the implementation of PPR control activities in the region. Only ECOWAS and IGAD have started the implementation of their regional strategies.

23. A total of 79 countries are engaged in the road map of which, according to PPR Monitoring and Assessment Tool (PMAT), 30 are at stage 1 (understanding PPR situation), 38 at stage 2 (control), 5 at stage 3 (eradication) and 6 at stage 4 (verification).

E. Resource Mobilization

24. The PPR GEP first phase (2017-2021) budget has been estimated to USD 996 million. PPR can be managed by vaccination, and a coordinated vaccination, if implemented properly, can eliminate the virus from the countries, regions and the world. Following FAO procedures, vaccines were procured and distributed to countries or to non-governmental organisations for field vaccination. The specific modalities for vaccination implementation are to be developed. Thus, the cost for the vaccination is the major part of the estimated budget and will allow for the vaccination by infected countries of 1.5 billion sheep and goats within a defined period. The procurement of vaccines, logistics, and post vaccination evaluation makes up more than 70% of this estimate; about 9% is allocated to the coordinated control of other small ruminant diseases prioritized in each PPR region, 7% to management and global coordination of PPR eradication, and 5% to surveillance, monitoring and assessment. Other activities include strengthening of laboratory and national veterinary services, the organization of regional roadmap meetings, along with strategy, advocacy, and communication supports.

25. The majority of funding for PPR GEP relies on resources at country level, in particular national budgets. Some catalytic programme components, including activities that support the effective implementation of action within and across regions, mobilization of additional resources for national and regional needs will be covered by the global component of the PPR GEP budget.

26. As of August 2018, it was estimated that approximately two-thirds of the PPR GEP budget had been financed by PPR infected and at-risk countries, and donors that FAO and OIE have been working with. The self-funding by PPR infected and at-risk countries represented about 61% of the mobilized budget thus far. However, it is unfortunate that these funds are not allocated specifically to PPR.

27. A Joint PPR Resource Mobilization and Marketing Strategy was developed which includes a marketing narrative, an analysis of potential funding sources and a detailed action plan. The marketing narrative is a human-centred approach outlining that ending PPR will greatly contribute to ending rural poverty, ensuring food security and to strengthening resilience (SDG1 and SDG2). The subsequent market analysis identifies potential resource partners at global, regional and national levels as well as strategic alliances. Domestic resources from affected countries will represent a crucial funding source. In September 2018, FAO, OIE and the European Union organized in Brussels the Global Conference “Partnering and Investing for a PPR-free World” which resulted in a ministerial
Declaration highlighting the need to fill a funding gap of USD 340 million for the first phase of PPR GEP.

28. Self-funded PPR GEP activities have been effected in China, India, Iran, Georgia, Kazakhstan, Kuwait, Mongolia, Saudi Arabia, and Turkey, among others. These cover approximately 35% of the global small ruminant population. Other government funded PPR control activities exist in several other countries; however, these are limited in extent due to resource constraints and cannot effectively control and eradicate the disease on their own.

29. Currently, PPR control activities in many countries are supported by the World Bank through regional and national livestock programmes such as (i) Regional Sahel Pastoralism Support Project (PRAPS) covering Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal; (ii) the Regional Disease Surveillance Systems Enhancement Project (REDISSE) for Guinea, Senegal, Sierra Leone; (iii) the West African Health Organization (WAHO) and (iv) the Regional Pastoral Livelihoods Resilience Project (RPLRP) for Ethiopia, Kenya, Uganda and IGAD Secretariat (which has limited contribution to PPR control activities at country level). Other countries funded by the World Bank are: Projet de Développement de l’Elevage (PRODEL-Cameroon), Bangladesh, Ethiopia, Burundi, Nepal, Somalia, and Yemen, among others.

30. The European Union’s Supporting Horn of Africa Resilience (SHARE) programme which supported PPR activities in Ethiopia, Djibouti, and Kenya has come to an end. However, an extension to September 2020 has been granted for Ethiopia.

31. New programmes supporting country level PPR activities have been developed. These include: i) Countries in the Southern African Development Community (SADC) through EU Support towards operationalization of the SADC Regional Agricultural Policy (STOSAR) project; ii) Burkina Faso, Mali and Niger through Pro-Resilience Action (PRO-ACT) with small PPR component; iii) Countries in Greater Mekong Sub-Region through FAO China South-South Cooperation project on Transboundary Animal Disease Control, covering Cambodia, Lao, Myanmar, Thailand, Vietnam and two provinces in China (Yunnan, Guangxi); iv) IFAD projects in several countries (e.g., Chad). Swiss cooperation through ECOWAS is supporting the Manu River countries (Guinea, Liberia, and Sierra Leone).

32. It should be noted that some international non-governmental organizations (NGOs), such as Veterinarians without Borders (VSF), and the International Committee of the Red Cross contribute to the PPR GEP activities by funding vaccination campaigns at community or provincial levels in different countries. Other donors are supporting the PPR GEP secretariat: France, the EU and the USA through the Defense Threat Reduction Agency (DTRA).

33. There is a need to intensify resource mobilization and advocacy efforts with the support of the Group of UN Rome-based Permanent Representatives friends of PPR GEP.

F. National activities

34. In Ethiopia and Pakistan, the capacity of vaccines laboratory production has been increased at least 5 fold, and today they are able not only to meet their national demand on PPR vaccines but are also serving neighbouring countries. Ethiopia supported the production of PPR thermos-tolerant vaccines, an important step to advancing PPR eradication.

35. Between 2015 and 2019, several countries were assisted by FAO to vaccinate over 100 million animals. Unfortunately, this number of vaccinated animals represent less than 8% of the 1.5 billion small ruminants targeted for vaccination.

36. In Afghanistan and South Sudan, trained community animal health workers are able to detect PPR at the grassroots level. Front line veterinarians have been trained for PPR control in several countries of Africa. These need to be scaled-up in the Middle East and Asia. The validation of a diagnostic kit has reduced the unit price of the kit three fold. Kits have been secured to test more than 50,000 samples to map out PPR distribution.
37. Sero-surveillance was carried out in several countries. This needs to be strengthened as well as the epidemiological surveillance networks. More than 90% of laboratories in infected and at risk countries have the capacity to use at least the enzyme-linked immunosorbent assay (ELISA) kit for PPR diagnosis. But reagents are a major challenge and these countries need to strengthen national and regional networks.

38. Collaboration for controlling PPR at the livestock-wildlife interface in Mongolia and Eastern Africa is ongoing through partnership between the WCS and the RVC of London, respectively.

39. Leaflets (1,500) on PPR clinical signs and field manuals in epidemiology were produced and distributed to countries. The FAO web page is available at: http://www.fao.org/pps/en/.

40. Technology transfer: FAO assisted AU-PANVAC to transfer vaccine production and quality control knowledge in Pakistan. The Organization also worked jointly with IAEA in organizing laboratories into PPR regional and global networks, strengthening veterinary diagnostic laboratories involved and ensuring the transfer of new technologies to those laboratories.

IV. Analysis of country requirements and activity plans and way forward

41. As at 2019, the PPR GEP funding gap was estimated at USD 340 million. The gap could have probably been reduced, thanks to contributions from national budgets and new projects. However, information on national contributions remain fragmented, making it difficult to provide a clear revised amount. Taking into consideration the disease situation, the impact of ongoing control activities, and the unfunded elements, the priority funding gaps and needs of the PPR GEP have been analyzed specifically at country level.

42. About 27 PPR-infected countries have very limited resources to implement their PPR NSP, in particular to finalize their Stage 1 (completing the epidemiological assessment process) and move to the control stage (Stage 2). The PPR situation needs to be assessed to establish the initial hypothesis of virus circulation and to identify the hotspots to be targeted by control interventions under Stage 2. Planned activities include the following: i) risk assessment including sampling and laboratory testing for PPRV and small ruminant value chain analysis; ii) development and implementation of a risk-based control plan; iii) stakeholder consultation and outreach; iv) support epizone approach; and v) integrated surveillance (linking epi-disease data, lab data and vaccine data and other relevant data together).

- The cost for these activities is estimated at USD 59,500,000 for the period 2020–2022.

43. Furthermore, 21 countries that have never reported PPR need assistance to develop capacity to demonstrate the absence of the PPR virus and move towards OIE official PPR-free status. Planned activities include the following: i) serological surveillance, ii) value chain analysis, iii) surveillance, iv) contingency planning; and v) preparation of documentation for official recognition of PPR-free status.

- The cost for these activities is estimated at USD 1,911,000 for the period 2020-2022.

44. Finally, 20 countries have been identified to be already in the control stage (Stage 2) but the PPR control activities do not have an impact geared towards eradication. These countries need support to revise their risk-based control plan and to re-focus control activities. Planned activities include the following: i) drafting/reviewing of a risk-based control plan, ii) implementation of the risk-based control plan, iii) post vaccination evaluation, iv) surveillance, and v) stakeholder consultation and outreach.

- The cost for these activities is estimated at USD 131,000,000 for the period 2020-2022.

V. Suggested Actions by the Programme Committee

45. The Programme Committee is invited to review the document, provide guidance and consider the establishment of a dedicated trust fund from voluntary contributions.