

DEVELOPMENT SUPPORT TO KENYAN FIRE AND EMERGENCY SERVICES

Provided by Polish Centre for International Aid and financed by Polish Aid Impact assessment 2014-2023

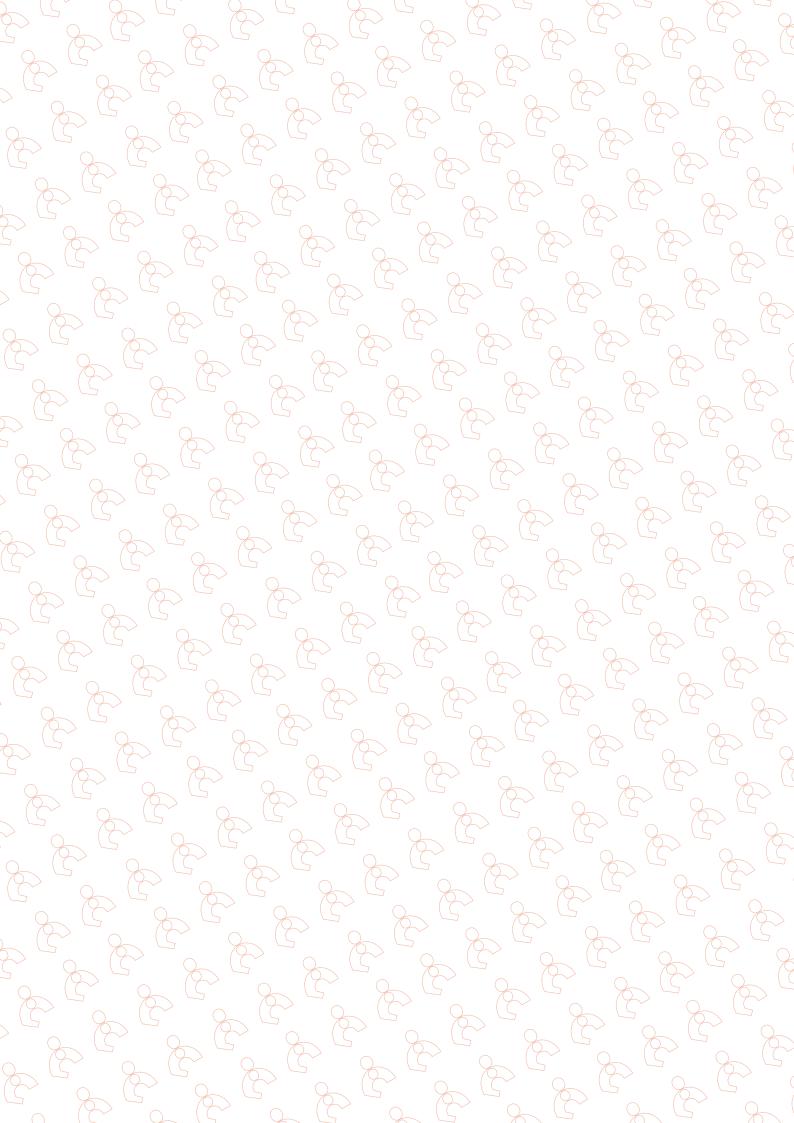


TABLE OF CONTENTS

List of Acronyms	2
Executive summary	3
About the project	4
Research Aims, Scope and Methods	6
Experts' Perspective: Workshops in Nairobi and Mombasa	8
Chief Fire Officers' Perspective: Survey among Heads of Fire Brigades	13
Frontliners' Perspective: Survey among Participants of Firefighting Trainings	20
Operation and Maintenance: Monitoring Visits at Fire Stations	28
Conclusions and Recommendations	33
Annex 1: Workshop with Fire Experts and Chief Fire Officers: Scenario	34
Annex 2: Questionnaire for Chief Fire Officers	37
Annex 3: Questionnaire for Training Participants	46
Annex 4: Monitoring Visits	48

LIST OF ACRONYMS

AFM - African Fire Mission
BA - Breathing Apparatus
CBRN - Chemical, Biological, Radiological and Nuclear Emergencies
CFO - Chief Fire Officer
CFOA/CFOA-K - Chief Fire Officers' Association Kenya
HazMat - Hazardous Materials
KTTC - Kenya Technical Teachers' College
MEAL - Monitoring, Evaluation and Learning
PCPM - Polish Centre for International Aid
PLAR - Prior Learning Recognition System
PPE - Personal Protective Equipment
RTA - Road Traffic Incident
TVETA - Technical and Vocational Training Authority of Kenya

USAR - Urban Search and Rescue

This report presents results of an impact assessment of development support provided to Kenyan firefighters as part of projects implemented by Polish Centre for International Aid (PCPM) and financed by the Polish Ministry of Foreign Affairs through its Polish Aid donor fund. The series of projects was implemented between 2014 and 2023. The research covers one more year (2013-2023) to establish a pre-implementation baseline for further analysis. The report provides data on firefighters' and fire brigades' capacities and resources, as well as challenges they have faced over the last decade. It also gathers firefighters' and fire experts feedback as to the projects' aims, implementation and results.

The evaluation research relies on the available monitoring materials as well as four field research methods: workshops with fire experts aiming to evaluate the relevance of the project from the local specialists' perspective, surveys with Chief Fire Officers to assess the changes in fire brigades' capacities over the last decade, surveys with participants' of firefighting trainings to learn more about the durability and applicability of the trainings' takeaways, and monitoring visits at the fire stations which received high-value in-kind assistance to look into its utility and the beneficiaries' operation and maintenance practices.

The main findings of this research point to the high relevance of the aid delivered to the needs of the beneficiaries, their high satisfaction from the Polish Aid-PCPM projects as well as the high likelihood of projects' sustainability. In particular:

- The research participants generally assessed the projects as in line with the needs of the Kenyan fire system. The equipment delivered was in use and the training graduates declared they consistently applied their new skills. - The projects supported institutional development of the Kenyan fire system: they contributed to standardization of teaching curricula, increasing accessibility to firefighting training and development of a system of firefighting competencies recognition. The modality of implementation also fostered self-organization of firefighters.

- The Chief Fire Officers reported the projects had the highest positive impact on the following types of rescue actions: road traffic accident, tactical firefighting, search and rescue, rope rescue and fire prevention. The survey with the training participants indicated the project positively impacted efficiency of rescue actions, teamwork and leadership.

- Both training participants and Chief Fire Officers declared they were satisfied or very satisfied with the aid provided.

- Based on the monitoring visits, the infrastructural and in-kind assistance provided in most cases minimized maintenance costs and requirements. In some cases, the Polish Aid-PCPM project incentivized county governments to provide further support to their fire brigades.

It should be stressed that the projects' impact has been strengthened by the increased public support to the fire sector provided over the last decade. Finally, the research results indicate challenges for future development of the system, including regional reducing inequalities and ensuring sustainability of the achieved development.

The report is divided into brief chapters. The first one presents the projects under scrutiny, the second outlines research methods and their limitations, and the following chapters discuss the research results method by method. The last chapter summarizes the research findings and proposes recommendations for future projects.

ABOUT THE PROJECT

Since the year 2014, the Kenyan fire system has been supported by the Polish Aid fund through projects implemented by the Polish Centre for International Aid (PCPM). The scope of the projects differed from year to year, nonetheless they shared the aim of building the first response capacities of the Kenyan fire system through training, in-kind assistance, infrastructural support and institutional development.

The in-kind assistance included both smaller pieces of specialized equipment and items of a larger value. The average yearly value of the equipment provided between 2014 and 2023 reached around USD 83 thousand. In the pandemic years 2020-21, when international travels and shipments became challenging and unpredictable, the value of support dwindled under 15 thousand USD on average. The rescue equipment delivered belonged to several categories, including rope rescue, water rescue, basic medical aid, hazardous materials (HazMat), road traffic accident (RTA). The Polish Aid-PCPM in-kind assistance also included items supporting the maintenance of the existing supplies (e.g. repair equipment) and office equipment.

As a part of infrastructural support, PCPM built a training center in Kiambu in the years 2018-2019. The training center has a capacity of up to 50 persons, a lecture hall, boardroom, administrators block and dormitories with 38 beds. Kiambu was selected because of the supportiveness of the County Government to the project, as well as its central location (including proximity of Embassies, donors offices and the international airport). In the subsequent years, PCPM constructed two fire stations to improve Road Traffic Accident (RTA) response along the strategic Mombasa-Nairobi highway, in Makueni and Machakos counties, in 2022 and 2023 respectively.









Fire Training Center in Kiambu

The fire stations were located in areas with poor access to effective fire response and high incidence of fire emergencies: the towns lied away from the county stations and the fire service often arrived too late. Bearing in mind the financial situation of the Kenyan fire brigades, the fire stations' design aimed for affordable construction and maintenance costs. The design also allows the fire stations' expansion in case their staffing and capacity increases. Following the handover of the stations, all costs, including hiring, additional infrastructural improvements (e.g. construction of water tanks or fencing) and additional equipment, have been covered from public sources.

Over the years 2014-2023, 1255 diplomas were handed to firefighters who completed the Polish Aid-PCPM training courses. The courses covered a vast range of topics, with most training hours devoted to tactical firefighting, road traffic accidents, rope rescue, fire science, fire prevention and medical first aid. As a part of the projects financed by the Polish Aid, training for volunteer firefighters and training of trainers were also delivered. On average, every year between 2015 and 2023, 140 graduation certificates were given out to firefighters participating in PCPM-organized training; with the exception of 2018, when no training was organized. In 2015 and 2016, complementary training for paramedics was also carried out, with 70 graduates in total. In 2020, the PCPM team assessed the number of firefighters trained by the trainers who completed the PCPM professional development courses. Based on the trainers' declarations, the number jointly reached 673 persons, which is over 60% of all firefighters in Kenya.

The annual reports reflect the gradual evolution of the project from general training in 2015-17 to development of rich vocational curricula, including advanced, specialized training courses. While its initial objectives can be summarized as "creating foundations of fire response" (to cite the 2015 report), later activities concentrate on institutional development, especially facilitating standardization of firefighters' training, and competencies recognition. In 2018, the projects aimed at creating material conditions for professional training of firefighters through construction of the Kiambu training center as well as through work with local partners towards establishing a national standard for firefighters' training. In the following years, institutional objectives became even more pronounced, with training components subordinated to the training standards accredited by Technical and Vocational Training Authority of Kenya (TVETA) in 2019. In cooperation with TVETA, PCPM and its local partners started working towards developing a system of firefighting competencies recognition, including a prior learning recognition system (later referred to as PLAR).

Throughout the 2014-2023 period, PCPM cooperated with local partners expecting such cooperation would lead to greater relevance and ownership of the project. These partners included: KENFIBA association, CFOA association and Kenya Technical Teacher's College (KTTC). The partnership with KENFIBA supported the projects' outreach and feedback mechanisms in the early years. In 2018, the partnership was terminated when the Association failed to keep the terms of the mutual agreement. PCPM soon developed a similar partnership with Chief Fire Officers Association - Kenya (CFOA), which proved more reliable and contributed to better integration of Kenyan firefighters on a national level. In cooperation with KTTC and with CFOA support, PCPM engaged in development and accreditation of training standards and certification procedures, and has continued its institutional work also after the first training standards had been accredited by TVETA. In 2023, PCPM started its cooperation with the Nyeri National Polytechnic in order to make the certified firefighting courses more accessible.

RESEARCH AIMS, SCOPE AND METHODS

The aim of this research is to provide basic information as to the impact of the Polish Aid-PCPM firefighting projects implemented in Kenya in the years 2014-2023. Since the time period is long and the scope of the projects vast, this assessment relies on earlier monitoring and evaluation results as well as field research conducted at projects' endline (November and December 2023). The 10-t year development aid program is considered as one undertaking rather than a chain of separate projects, although the Polish Aid financing was awarded for one, two or three years based on separate grant agreements.

This assessment seeks answers to the following questions:

- Have the projects been in line with the Kenyan fire system's needs as defined by the local fire experts?
- Have the beneficiaries been satisfied with the projects' results and the modality of their implementation? And if so, what are

the main reasons for beneficiaries' satisfaction?

- What are the main impacts of the project? Which of them were intended and which ones not?
- Are the results sustainable in terms of operation and maintenance?

The desk research materials used in this research include: yearly project reports filed to the donor (which outline the process of implementation of the project and its main achievements), surveys with firefighters taking part in trainings (including training needs and satisfaction surveys), and a needs assessment report based on a research conducted in June 2018 (covering the main capacity building needs of 12 counties).¹ The materials have been used to provide a point of reference for the design of research tools and, later, a context for the field research results. The field research relied on four methods characterized in the table below.

METHOD	AIM	REMARKS
Survey with Chief Fire Officers (CFOs)	To gather information about fire brigades' operational capacities in the years 2013-2023, and the impact of Polish-Aid PCPM project on these capacities	Data collected in November and Decem- ber 2023 Non-anonymous questionnaire focused on fire brigades' capacities Questionnaires filled by respondents 21 questionnaires from 20 counties
Survey with participants of trainings	To gather additional feedback of training participants on the PCPM-Polish Aid trainings and their impact on the firefighters' daily work	Data collected in November and Decem- ber 2023 Anonymous questionnaire with closed and open questions Phone survey 30 respondents of 21 counties
Visitations at fire stations	To check whether the in-kind assistance is present, in good condition, used and properly maintained	Monitoring visits at selected fire stations which received high value in-kind or infrastructural assistance Non-anonymous data Monitoring visits on appointment
Experts' workshops	To establish a benchmark for evaluation of the projects' relevance	Workshops with Kenyan fire experts aiming at characterizing the past 10 years of development of the service and forecasting its future challenges

TABLE 1. METHODS OVERVIEW

¹ Firefighters Training in Kenya: Needs Assessment and Training Curriculum, Rafał Własinowicz (ed.), PCPM 2019.

These methods have their limitations. The main one is related to the character of the earlier monitoring data. The monitoring tools used in the project developed overtime and produced data which were useful for implementation purposes, but did not always allow for comparison of results from year to year. Aligning questionnaires for this impact assessment with the previous monitoring tools was difficult especially in the case of surveys with firefighting training courses' participants. The monitoring surveys cover only the years 2022 and 2023, and use different questionnaires from year to year. Apart from the year 2014, no data on dropout rate was available. It was also unadvisable to extend the research sample to graduates from the early years of the project as they were unlikely to remember much from their trainings anymore. As a result, beneficiaries who participated in the Polish Aid-PCPM trainings earlier than 2019 or those who dropped out of the trainings were not included in the research. This gap may result in an overestimation of the positive impact of the project.

A valuable point of reference for this research is the, already mentioned, needs assessment report based on data gathered from firefighting brigades in 2018. The needs assessment was repeated in 2019. Some of the questions from these surveys, after minor adjustments, were repeated in November and December 2023 in questionnaires sent out to the heads of fire brigades (Chief Fire Officers). Thanks to the solid monitoring material from the earlier phase and high response rate among the fire brigades in 2023, this set of data has the highest reliability of all data gathered through this research.

Nonetheless, some baseline information had to be reconstructed in retrospect and their reliability may be biased by beneficiaries' ability to retrieve information from 2013/2014. This impact assessment has an internal character. It has been prepared by the PCPM MEAL department in cooperation with the PCPM team implementing the project as well as its main partner in Kenya, the CFOA. As a result, the results may be biased by beneficiaries' expectations of further support or the implementation team's hopes for positive results. To mitigate these risks all research participants were clearly informed that the research would have no impact on future assistance and persons directly involved in the projects' implementation were excluded from conducting workshops and surveys. Also, an external consultant was hired to conduct workshops with high ranking fire officers and experts.

For Reader's convenience, each method is briefly introduced at the beginning of the following chapters. Additionally, questionnaires used in this research are annexed to this report.



Firefighter: Bilha Muchiri



Firefighter: Jose Ngunjiri

As a part of the impact assessment, two two--day experts' workshops on the needs of the Kenyan fire and emergency services system were conducted. The workshops' participants were Chief Fire Officers, firefighting experts and representatives of collaborating institutions or organizations of the fire service. The first workshop was held in Mombasa between 27-28th November, with 35 participants. Two days later, 41 firefighters and experts participated in a workshop in Nairobi (30th November - 1st December). The participants represented fire brigades of 19 counties as well as the following institutional stakeholders: Kenya Airports Authority (KAA), Kenya Ports Authority (KPA), Kenya Pipeline Corporation (KPC), Kenya Red Cross, the National Disaster Management Unit in the National Police Services, St. Johns Ambulance, KK Security as well as the CFOA.

In this report, the participants have been treated as experts, i.e. it is assumed that their observations on the Kenyan fire system are based on high competencies and, in the context of the workshop, remain unbiased by interests. Consequently, particular the workshops' results are used as a benchmark against which the PCPM activities can be evaluated as to their relevance. Have the PCPM been right in providing training, in-kind assistance and supporting changes on the institutional level? Or perhaps, other activities would have been more relevant to the needs of the Kenyan fire system? These are the key questions of this chapter.

The workshops' participants were put before two tasks. The first one was to identify the main challenges facing the Kenyan fire system over two decades: in 2013/2014, in 2023/24 and in 2033/2034. The task required them to analyze the needs of the system in retrospect, identify current challenges and make predictions as to the nearest future. This exercise allowed the participants to reconstruct both the evolution and the persisting challenges of the fire system. The second task required them to reflect on the role and quality of support provided to Kenyan firefighters by international organizations and agencies, and to formulate recommendations on such aid provision. Once again, the participants were to think of the three points in time and propose directives relevant to each period.

For many of the participants, the workshops were the first ever occasion to discuss the fire system's needs and development in such a big and diverse group of colleagues. Thus the workshops contributed also to a country wide integration of Kenyan fire service representatives.

CHALLENGES

The workshops' participants often used different words to describe the same thing. To avoid confusion, the following categories are applied in this report to synthesize their observations:

- Firefighters this category refers to firefighters' number as well as their skills, knowledge and psychological capacities (such as motivation or self-confidence) to engage in firefighting work;
- Technical capacity this refers to equipment and infrastructure at the disposal of fire brigades; equipment and infrastructure may be present or absent, functional or not, outdated or in line with international technological standards;
- Human-made and natural environment the category refers to the conditions of firefighters' field operations and their changes, e.g. urbanization, poor access to water, or poor road infrastructure;
- Coordination the category covers cooperation between firefighters and other first responders or services in complementary or overlapping areas of their activity;

TABLE 2. PAST, PRESENT AND FUTURE CHALLENGES FACING KENYAN FIRE SYSTEM ACCORDING TO WORKSHOPS' PARTICIPANTS

PAST (2013/2014)	PRESENT (2023/2024)	FUTURE (2033/2034)
Firefighters		
 Too few firefighters Lacking basic skills Lack of female firefighters No clear career path and guidance for fire fighters Lacking motivation Too few fire brigades concen- trated in major towns and cities 	 Too few firefighters Lacking skills corresponding to the requirements of rescue actions (USAR, highrise buildin- gs, floods, wildland fires, mine collapse, house collapse) Low motivation Low wages 	 Too few firefighters/High personnel demand Lacking skills corresponding to the requirements of rescue actions, including the emerging challenges related to technolo- gical development, climate challenges and urbanization
Technical capacity		
 Lack of fire stations Poor adoption of technology Lack of PPEs 	 Inadequate fire stations in terms of equipment and facilities Lack of equipment up to the current technological standards 	• Lacking or inadequate equipment
Human-made and natural environm	ient	
No challenges discussed	 Poor roads infrastructure/ poor urban planning Poor water supply Increasing number of calls requiring complex operation in urban and industrial contexts 	 Climate change leading to extreme weather conditions Population growth, further urbanization and aggressive infrastructural development resulting in building collapses, urban flooding, scarcity of land and congestion due to high population density Scarcity of water
Coordination		
No challenges discussed	 Poor coordination between counties, national government and other agencies Poor communication systems and coordination of emergency services 	No challenges discussed
Regulative framework		
 Lack of regulation guiding firefighting services 	 Lack of policy to guide opera- tions 	 Development of laws without stakeholder engagement and participation High level of non-compliance with fire safety standards Legislation unable to keep pace with new realms of economic activity (e.g. quarrying)
Significance of fire brigade to politi	cal decision-makers	
 Lack of knowledge among political leaders Lack of advocacy on fire and rescue services 	 Political interference Lack of political goodwill Low public funding 	No challenges discussed
Social legitimacy and recognition		
 Lack of public awareness in fire safety and firefighting services Hostility from some members of the public 	 Need for conflict management, raising awareness and ensuring protection for response teams 	No challenges discussed

- Regulative framework the category covers standards, policies and laws regulating the fire system as a whole; it does not apply to regulations on the level of individual stations;
- Significance of fire brigade to political decision-makers – this category covers local and central level politician's support to firefighters and the fire system's presence on their agenda;
- Social legitimacy and recognition the category is used to describe relationships between the fire service and local communities, especially social endorsement of fire service's core activities, trust towards its representatives and awareness of fire safety importance and basic standards.

The table mirrors the dynamic development of the Kenyan fire system. Although the need for qualified firefighters and specialized equipment is seen as a persistent challenge by the experts, the emphasis of the importance of specialization significantly grows with time. Similarly, the importance of institutional work is perceived as gradually increasing. The workshop participants see also the need for cohesion within the system: most support should be directed to the underinvested periphery. The experts are rather pessimistic about the political endorsement of the fire system's development in the future, although the challenges they list, especially those related to the natural and human-made environment, clearly indicate it as needed.

Considering the workshops' results, the key objectives of the Polish Aid-PCPM projects corresponded to the main needs of the Kenyan fire system. The projects' strengths were especially the shift to institutional capacity development and the constant focus on providing training and equipment. So far however, the scope of the Polish Aid-PCPM support, especially the in-kind and infrastructural assistance, may have been too small to mitigate the regional inequalities in fire service's development.

RECOMMENDATIONS

The second part of the workshop tasks involved formulating recommendations for aid organizations involved in support to the Kenyan firefighters or the fire system as a whole. The recommendations were supposed to be time specific: just as the lists of main challenges, they were to refer to the years 2013/2014, 2023/24, or 2033/34. The detailed account of the discussion can be found in Mr. Kiragu Wahira's, the CFOA Consultant's, report who moderated the workshops. Here, the material is analyzed further, but more selectively, with a focus on evaluating the aid provided by PCPM.

Regardless of the time period, the recommendations centered around the challenges identified in the earlier task, and indicated the scope of support needed rather than the preferred modality of support, i.e. the participants stressed the need for more equipment up to the international standards rather than for more say in aid provision. This is likely to stem from the fact that the participants still did not have much experience with aid organizations and had not experienced dysfunctions of aid provision they would like to protest against.

The main gaps and challenges that the fire brigades faced in 2013/2014 centered around the needs for fire station buildings (sparse fire station network), trained firefighters and basic firefighting equipment. Unlike the challenges formulated in the preceding task, the recommendations made in retrospect were rooted in systemic reflection. According to the participants, already then the capacity building and infrastructural improvement activities should have been oriented towards establishing operating standards for the fire brigade service. In the hindsight, aid organizations should have focused on supporting recruitment and training of firefighters and fire volunteers, and on addressing lack of public awareness in fire safety. At the same time, the aid activities

should have been assessment-based and directed to the units most in need, located in the peripheries, which seem the only recommendations addressing modalities of aid projects' implementation. In response, PCPM highlighted that direct training of firefighters was the most cost-effective and quick-impact program approach, particularly taking into account limited funding (\$200 - \$250,000 per year for the whole of Kenya).

The participants' recommendations for the present (2023/2024) were similar, but clearly informed with the development of the firefighting system already achieved. This discussion was also richer in recommendations on modalities of operation of aid organizations. The participants argued for more cooperation with central level institutions to ensure that the aid provided facilitates creation and official recognition of standards (of education, operation, equipment, etc.), or is provided as part of accredited services provided by accredited specialists. The workshops' participants pointed also to the need of specialized (rather than general) training, including leadership skills, HazMat, structural firefighting, water rescue and urban search and rescue. They opted for a grant system for infrastructural improvement, mapping of resources already in place on both national and county levels and, again, stressed the need for support to be decentralized. The need was also voiced to offer psychosocial support to the firefighters. In response, PCPM highlighted its efforts to accredit Kenyan fire brigade examiners who need to be accredited by foreign examiners, as there are no firefighters with the required tertiary fire-related education in Kenya. While larger aid budgets would be much welcomed, PCPM had to make the best use of the available Polish Aid funding (\$300 - \$400,000 per year) and address donor's fatigue stemming from funding fire brigade training for eight consecutive years.

The discussion on cooperation with aid organizations in the near future (2023/2024) covered a point not mentioned in the earlier discussions; namely, the need for a development of research, documentation and learning within the fire system. This includes not only the need for more thorough reporting and data analyses, but also for more opportunities for sharing of knowledge and experiences through exchange programmes. The participants put stress on expertise, recommending that policies and teaching materials currently developed should be additionally reviewed by experts. Apart from that, the future was not to be much different from the past and the present: more trained people and equipment were needed. The challenges related to urban and technological development were to be even more pronounced, requiring especially regular training in CBRN, HazMat and similar emergencies. The participants predicted that the fire stations in ten years would still be short of equipment they had been lacking currently: RTA, ambulances, PPEs, wildfire EMR equipment, and rope rescue equipment.





Firefighting training in Kiambu

Discussion on PCPM program review and evaluation, held only during the Nairobi workshop, listed following achievements and indirect positive results of the Polish Aid-PCPM projects, which matched the expectations of the workshops' participants

- Creation of platform for discussion on fire and rescue services;
- Increase in skill set;
- Better equipped fire stations;
- More awareness of policy makers;
- Development of curriculum;
- Establishment and accreditation of Firetrack as a fire and rescue training school;
- Establishment of cost-effective fire stations;
- More firefighters have been recruited;
- Availability of more fire equipment;
- Increase in availability of training of trainers, including specialized training of trainers;
- Better relations with the public;
- Broader networks with other counties;
- Recognition of firefighters by counties;
- Stronger bonds within firefighter community.²

It should be stressed that the list also includes indirect impacts of the project and that all of the impacts listed are also (if not primarily) the results of the beneficiaries' work and determination. The following chapters seek to examine the projects' impact based on its direct beneficiaries feedback.

A note on the PCPM response to the workshops' results and the challenges raised during these meetings should be made. In a recent presentation (December 2023) summing up the projects results and proposing the way forward, PCPM highlighted that the need for advanced level training in Hazmat, CBRN or USAR only highlights major improvement in the skillset of Kenya's fire brigades achieved since 2014. Furthermore, equipment provision for the Kenyan fire brigade service should be based on procurement

done and funded by the local authorities, which is the only avenue to ensure sustainability in that respect. The general idea of the presentation was that while development aid can address immediate and well-defined needs, it is not a long-term solution.







Rope training for firefighters

² Kiragu Wahira, Report of End of Term Project Evaluation Workshops for Polish Center for International Aid-Kenya, CFOA 2023, pp. 9-10.

CHIEF FIRE OFFICERS' PERSPECTIVE: SURVEY AMONG HEADS OF FIRE BRIGADES

In November and December 2023, a survey was distributed among heads of fire brigades who had benefited from PCPM support in the form of training, in-kind assistance or infrastructural improvement. The surveys focused on fire brigades' capacities in the last decade and the external conditions which may have influenced their development (such as availability of public funding or aid projects as well as maintenance costs). The survey was filled out by Chief Fire Officers (or persons designated by them) from 20 counties, and by one ex-CFO, currently Auditor at Directorate of Occupations. Since fire brigades are public institutions, the survey was not anonymous or confidential. In order to ensure respondents' comfort, no sensitive information was collected. Moreover, the results are presented as aggregated statistics rather than individual profiles of each brigade.

As already explained, the survey was filled out by chiefs of those brigades which received support as part of the Polish Aid-PCPM projects. However, the scope of aid received differed greatly between the respondents. Some of the stations have been included in the Polish Aid projects only recently or benefitted of support of low value (e.g. one training or in-kind assistance whose value was measured in hundreds rather than thousands or tenths of thousands dollars). Others benefitted from longer-term high-value aid. This difference has impacted the survey results: among the brigades whose involvement in the Polish Aid projects was lesser, there were also brigades whose situation deteriorated over the last decade. The aggregated results - averages, modal values and medians - do not mirror their condition as they are an outlier. Most fire brigades have significantly developed over the last decade. One of the aims of this chapter is to estimate how much of this development can be attributed to the Polish Aid-PCPM projects.

FIRE BRIGADES DEVELOPMENT 2013-2023

The respondents were asked to provide a number of stations, fire engines, pieces of firefighting equipment, and firefighters in 2013 and 2023.³ The list did not cover all resources possibly at disposal of a fire brigade, but focused on "marker" resources allowing to assess both the fire units' development and their needs.

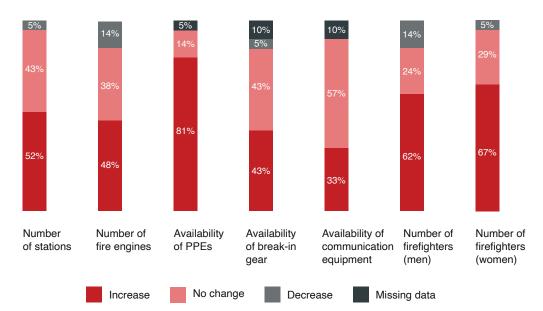
In 2013, 25% of brigades did not have a station, and 3 did not have any fire engine. 50% had no break-in gear, 45% lacked any personal protection equipment (PPE), and 60% had no communication equipment at their disposal. In 2023 the situation was significantly better: one brigade (5%) declared they did not have a station, one (5%) lacked a fire engine, break-in gear was absent in 3 (15%) cases, PPE in one case only (5%), and communication equipment in 5 (25%). Nonetheless, the stations typically declared the equipment was "present, but insufficient". Even in case of such essential equipment as the PPE, only one brigade declared they had sufficient supply. Despite the improvement, the fire brigades still remain largely underequipped. Figure 1 recounts the relative change in supply of the "marker resources" included in the survey.

The principal resource of every brigade, firefighters, has significantly grown in number over the last decade. The number of men in service has grown from 17 to 28 per station while the number of women firefighters has increased from about 1 to between 3 and 4 per station. In 2023, an average station had 169% of its 2013 number of employees.

Firefighters have also become more skilled and better equipped.

³ Or the year the brigade was established in case it had not existed in 2013 yet.

FIGURE 1. RESOURCES OF FIRE STATIONS 2013-2023



The respondents were asked to assess their brigades' human and technical capacities in 13 areas, using a scale from 1 to 7 (where 1 stood for no capacity and 7 stood for expertise). The average grade increased significantly from 2013 to 2023. Judging from the results, brigades were barely able to respond to calls involving hazardous materials or rope rescue

skills. They had poor skills related to medical first aid or emergency vehicle operation. The only capacity an average station possessed at a level close to the middle of the scale was tactical firefighting, and no capacity was graded higher. Nearly the same results have been recorded for the brigades' technical capacity (see figures 2,3).

FIGURE 2. SELF-EVALUATION OF SKILLS AND KNOWLEDGE OF FIRE BRIGADES: AVERAGE GRADES IN 2013 AND 2023, 1-7 SCALE



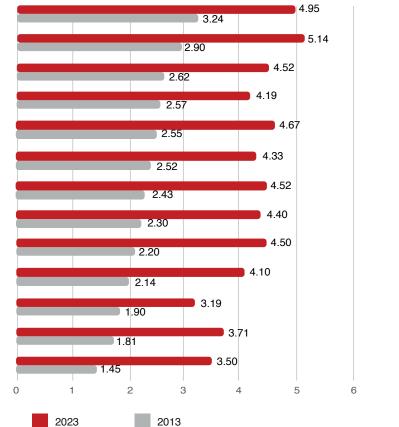
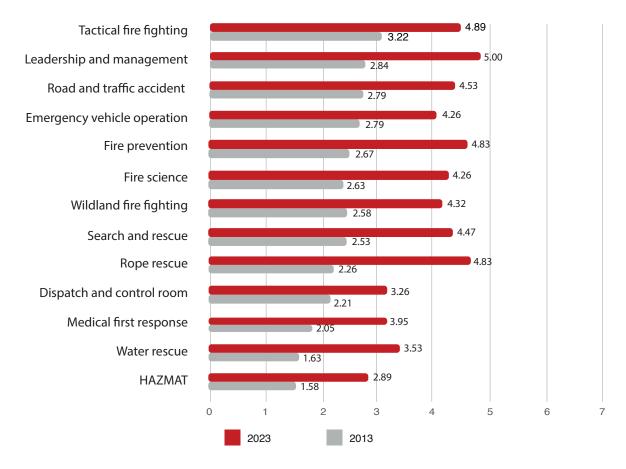


FIGURE 3. SELF-EVALUATION OF TECHNICAL CAPACITY OF FIRE BRIGADES: AVERAGE GRADES IN 2013 AND 2023, 1-7 SCALE



An average may be a misleading statistical measure as extreme results significantly impact its value. Therefore, it is useful to check also how many of the brigades improved their capacities. Over 81% respondents declared improvement of firefighters' skills in the areas of emergency vehicle operation, fire prevention, hazardous materials management and tactical firefighting. In all the remaining areas, the share was smaller but still exceeding 50%. Technical capacity improvement was reported by a slightly smaller share of respondents.

The results point to dynamic development of the fire units in key areas of their operations. The development of firefighters' skills has been faster than that of fire units' technical capacities (equipment and infrastructure). Moreover, the development has been uneven between counties, which confirms one of the takeaways from the experts' workshops. Heads of fire units away from the biggest cities, located towards the West and North of the country, tended to declare no change or deterioration more often.

PUBLIC SUPPORT AND ITS IMPACT ON FIRE BRIGADES' DEVELOPMENT

The capacities' improvement was brought about in part by public support. Over the last decade the central government as well as counties' subsidies for fire brigades increased. At the same time, brigades across Kenya received firefighting equipment (mainly fire engines) and several new stations were built. The effects of public investment in the fire system are also visible in the research sample. 5 respondents declared their brigades received fire engines from the central government, 1 declared a station was built for their brigade, and 1 declared 16 new firefighters were employed and water tanks were to be built at their station by the county government. The figures below show declarations on the level of public funding for each station and estimated impact of public support on fire brigades capacities. It should be noted that despite the increase in the public funding availability for fire brigades, the level of funding had remained below the brigades' needs.

Out of the 20 brigades included in the sample, only 2 were able to cover full costs of operation and maintenance of their equipment. None was able to cover the cost of training needed by their firefighters.

The fact that most brigades struggle with operation and maintenance may be a reason why the Chief Fire Officers assess the central government and county funds as well as their in-kind support as relatively unimpactful, considering the scope of development achieved by the fire brigades. Even though public sources are more reliable and, all in all, provide funds of higher value, the Chief Fire Officers tended to estimate them as insufficient to achieve significant development. In the next section, analogous data on Polish Aid-PCPM support are discussed. It seems worthwhile to consider the impact of aid in the light of the burdens already carried by the public system, i.e. as a complementary resource for the fire system's development.

TABLE 3 SELF-EVALUATION OF CAPACITIES OF FIRE BRIGADES: SHARE OF BRIGADES WHO REPORTED IMPROVEMENT, NO CHANGE OR DETERIORATION BETWEEN 2013 AND 2023

	SKILLS AND KNOWLEDGE			TE	CHNICAL CA	PACITY
	Improvement	No change	Deterioration	Improvement	No change	Deterioration
Emergency vehicle operation	81%	10%	10%	81%	10%	10%
Fire prevention	81%	14%	5%	81%	14%	5%
HazMat	81%	19%	0%	81%	19%	0%
Tactical fire fighting	81%	10%	10%	81%	10%	10%
Fire science	76%	19%	5%	76%	19%	5%
Leadership and management	76%	14%	10%	76%	14%	10%
Medical first response	76%	19%	5%	76%	19%	5%
Road traffic accident	76%	19%	5%	76%	19%	5%
Rope rescue	76%	19%	5%	76%	19%	5%
Wildland fire fighting	76%	19%	5%	76%	19%	5%
Search and rescue	71%	24%	5%	71%	24%	5%
Water rescue	67%	29%	5%	67%	29%	5%
Dispatch and control room	57%	33%	10%	57%	33%	10%
	0% missing 5% missing					

FIGURE 4. PUBLIC FUNDING FOR FIRE BRIGADES IN 2013-2023 BASED ON RESPONDENTS' DECLARATIONS (MISSING DATA EXCLUDED)

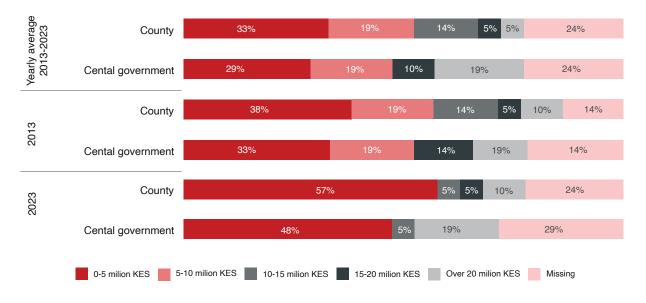
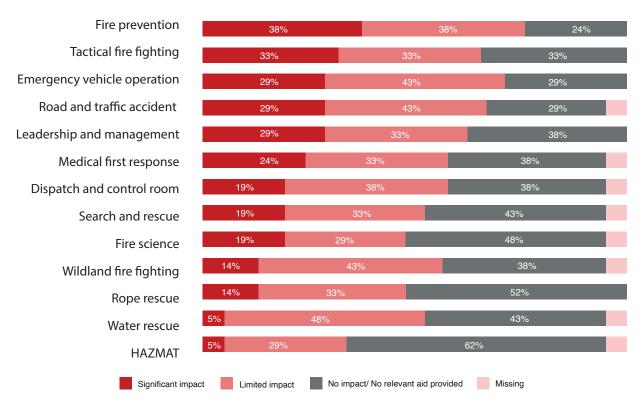


FIGURE 5. IMPACT OF PUBLIC (CENTRAL OR COUNTY LEVEL) SUPPORT ON FIREFIGHTING CAPACITIES DEVELOPMENT



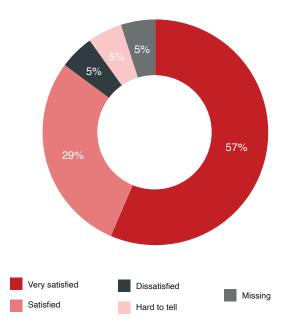
IMPACT OF PCPM SUPPORT

All brigades included in the sample received support from the Polish Aid-PCPM projects. 40% received training and the remaining 60% benefitted also from in-kind assistance or infrastructural improvements. As already explained, some of the units received aid of larger scope while others benefitted from single activities. Three units which received relatively little support ⁴ constituted an outlier in questions related to impact and satisfaction: these respondents declared it was difficult to estimate either, ⁵ or used the comments to express their dissatisfaction at the fact their units received less aid than other brigades.

Overall, 86% of respondents declared they were generally satisfied or very satisfied with the aid provided. As already mentioned, reasons for lower satisfaction levels given by the remaining respondents were related to their disappointment at not being provided with more assistance. These answers show that the Polish Aid-PCPM support was generally considered as valuable (also by the dissatisfied respondents).

FIGURE 6. ANSWERS TO QUESTION:

"Overall, how satisfied are you from the support provided by PCPM?"



4 Training in one year only or one-off in-kind assistance worth up to 1000 USD.

⁵ The respondents skipped questions or decided to opt for "Hard to tell", when the option was available.

FIGURE 7. RELEVANCE AND SUSTAINABILITY OF AID PROVIDED BY PCPM AND FUNDED BY THE POLISH AID

...was comprehensive 62% 14% ...created a durable positive impact 57% 10% ...created only affordable operation and maintenance costs ...was timely delivered 48% 67% ...was of high quality 10% ...was relevant to our brigade's needs 71% Yes Definitely no Definitely yes Hard to tell No Missing data

The aid provided as part of Polish Aid-PCPM projects was evaluated highly against the criteria of relevance, quality, timely delivery, comprehensive character and sustainability. Most respondents agreed the aid met these requirements, with fewest declarations (67%) confirming the affordable character of the operation and maintenance costs created by the assistance. This result may be related to the (already mentioned) inability of most brigades to cover their regular operation and maintenance costs in full.

The aid provided...

The respondents assessed the aid highly also in terms of its impact on firefighting capacities. In case of each of the 13 capacities we asked about, more than half brigades' representatives declared the projects had an impact on their capacity development. The project contributed especially to the development of rescue capacities in road traffic accidents (71% respondents declared the impact was significant and 24% felt it was important, but remained limited), tactical firefighting, search and rescue, rope rescue and fire prevention (in each case 67% respondents said the impact was significant and at least 10% said it was limited).

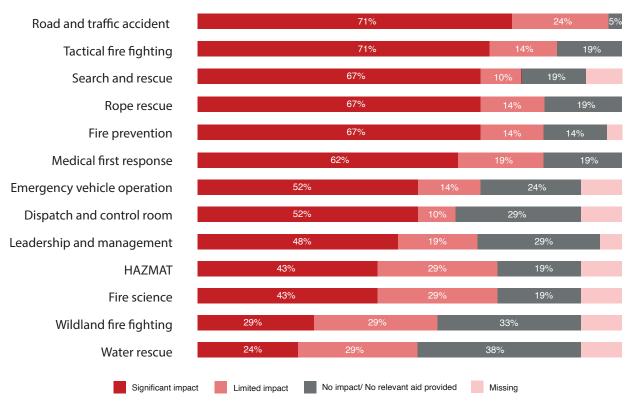
The impacts on skills and knowledge were highest in areas where the projects delivered the most intense training (which are: tactical firefighting, RTA, fire prevention, rope rescue and medical first aid). A comparison between Figure 8 (below) and Figures 2 and 3 shows moreover, that these have been areas of most intense development for the fire units included in the survey. This correspondence strengthens reliability of results pointing to the Polish Aid-PCPM support as a main trigger for capacity development.

The aid provided by the projects was assessed as, on average, more impactful than public support provided to the brigades. Declarations of no impact in case of PCPM projects were nearly twice less frequent (1.77 times) than in case of public support. However, it should be noted that the Polish Aid-PCPM support has been designed as complementary to public funding, and its sustainability remains largely dependent on availability of this funding to the fire units (the basic costs of operation and maintenance of each fire brigade have been covered from public sources).

FIREFIGHTERS AND LOCAL COMMUNITIES

The respondents were also asked about their relationships with their local communities. These questions aimed to check whether changes in capacities translated to social trust, recognition and better outlooks for new recruits to the service. The respondents were asked to assess how far they agreed with statements on the topic, with reference to the years 2013 and 2023.

FIGURE 8. IMPACT OF POLISH AID-PCPM SUPPORT ON FIREFIGHTERS CAPACITIES AS ASSESSED BY THE RESPONDENTS



The respondents believed they and their work were seen in a much more positive light at the end of the decade compared to its beginning. No respondent declared the attitudes towards firefighters became more negative or their social status eroded. Significant differences were noted with regard to social behaviors directly translating to fire safety, e.g. readiness to treat fire engines as priority vehicles was perceived higher by 60 percentage points, and readiness to take advice on fire safety from a firefighter by 40 percent in 2023. Other results indicated an increased understanding of the challenging character of effective response, e.g. social respect, awareness of the dangers of the profession as well as trust that firefighters were doing their best were declared by 50 percentage points more often when comparing presence with the past. Perhaps most importantly, the respondents believed that "people wanted to be firefighters" more often in 2023 than in 2013 (which is also mirrored by the growing numbers of new recruits joining the brigades). They also declared they were appreciated by their employer more in the present than they were in 2013.

Just as the table above, some of the results cited later point to the indirect positive impact of the projects on fire units' social recognition. While this kind of impact is likely, it has not been verified by any research among non-firefighters belonging to the local communities. No comparable longitudinal data are available.

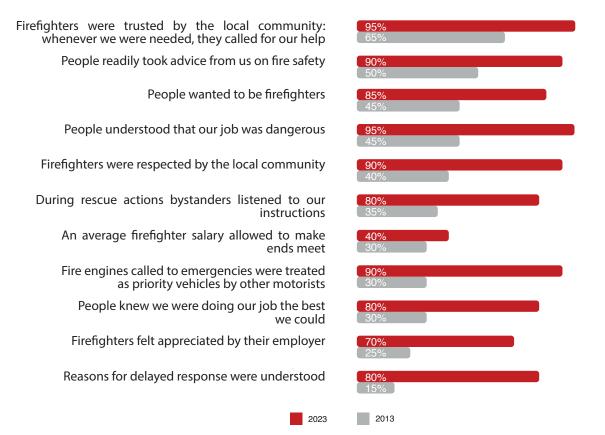
PROJECTS' IMPACT SUMMARIZED

The Polish Aid-PCPM projects' impact may be summarized in three points. Firstly, the last decade was one of intense development for the Kenyan fire service. Even though the respondents assessed the projects' impact as, on average, higher than the impact of public support, the positive effects of the Polish Aid-PCPM activities have likely been strengthened by the synergy with public efforts at improving the functioning of the fire service. Secondly, the biggest impact was achieved where most effort was invested. The projects contributed to a significant growth in knowledge and skills in road traffic accidents, tactical firefighting, rope rescue and fire prevention.

On the whole, firefighting training turned out to be the most impactful element of the projects, probably because these activities had the biggest scope.

Finally, two development challenges for the Kenyan fire units emerge from the survey. One of them is maintenance. Most of the brigades interviewed hardly made ends meet,

FIGURE 9. FIREFIGHTERS AND LOCAL COMMUNITIES IN 2013 AND 2023 -SHARE OF POSITIVE REPLIES ("DEFINITELY AGREE" OR "AGREE")



FRONTLINERS' PERSPECTIVE: SURVEY AMONG PARTICIPANTS OF FIREFIGHTING TRAININGS

30 respondents took part in a survey aiming at assessing the impact of the various training courses in firefighting provided by PCPM between 2019 and summer 2023. Only respondents who completed their last training no earlier than three months before the interview were included in the sample. Although including respondents from 2019 entailed a risk they would not remember their training well anymore, it was decided their participation was needed to cover both the pre-covid-19-pandemic and the pandemic training. The latter was conducted largely online and may have differed in impact from face-to-face, practice-oriented training.

despite the fact that public funding directed

to them slightly increased over the last

decade. The second one is uneven develop-

ment or the regional differences in development of the fire service. Future projects will

have to take both of these challenges into

account, bearing in mind both sustainability

and regional cohesion.

Two potential respondents declined participation in the research. Thus, the response rate reached 94%. This readiness of the participants to take part in the survey itself indicated a positive attitude towards the project. Nonetheless, the sample cannot be treated as statistically representative. We included a number of open questions to compensate for this limitation with a deeper, qualitative insight. The results provide an overview of the possible impacts of the project rather than information as to which of the impacts were more and which ones less likely.

RESPONDENTS' PROFILE

The respondents came from 21 counties, including: Bomet, Bungoma, Garissa, Isiolo, Kajiado, Kiambu, Kilifi, Machakos, Makueni, Migori, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Nyeri, Tana River, Tharaka Nithi, Trans Nzoia, Uasin-Gishu. Men dominated in the research sample accounting for 87% of research participants. This percentage corresponds to the share of women in Kenyan fire brigades, as the survey among Chief Fire Officers showed.

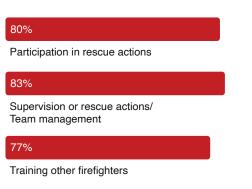
13% Men 87% Women

FIGURE 10. RESPONDENTS BY GENDER

Most respondents had an abundance of work experience. They had already served as firefighters for 14,3 years on average, and 50% of them had served for 10 years or more (median: 9.5). The firefighter longest in service had 34 years of experience, the youngest in terms of experience served for 4 years. For all respondents firefighting was regular work (none was a volunteer) and nearly all worked over 40 hours a week (in two cases the time was difficult to calculate based on declarations). Their responsibilities typically included participation in rescue actions, supervising rescue actions or managing a team, and training other firefighters. Over half of the sample were responsible for all the three areas.

Considering the structure of the sample, the survey provides feedback of highly experienced firefighters with a good understanding of the challenges related to capacity development of firefighting units in Kenya.

Figure 11. Key work responsibilities of the respondents (multiple choice question)



CAPACITY BUILDING OPPORTUNITIES

To assess whether the PCPM training activities responded to the respondents' needs, we asked, among others, how often the respondents took part in a firefighting trainings and how the cost was covered. Half of the trainees said they participated in a firefighting training, excluding the PCPM activities, at least once a year, and another half did so once every few years. Over one fourth of the respondents (27%) declared they covered the cost of such training themselves, and less than one third (30%) said the cost was covered by their employer.

These answers point to a scarcity of training opportunities. Considering the financial condition of most fire stations in Kenya as well as the low salaries of firefighters, an average firefighter depends on "another party" (mostly non-governmental organizations) as far as his or her capacity development opportunities are concerned.

PCPM TRAINING TOPIC	# DECLARATIONS	% DECLARATIONS
Rope rescue	18	60%
RTA	17	57%
Firefighting	17	57%
CBRN/Hazmat	14	47%
USAR	11	37%
First Aid/EMT	10	33%
First aid	9	30%
Maintenance and repair of fire equipment	8	27%
ТоТ	7	23%
Other	6	20%
BA	3	10%
Prevention	3	10%

The respondents were also asked which of the PCPM-Polish Aid's trainings they participated in. Most of them answered by providing a training's topic. An average respondent named at least 4 training topics, and the record beating answer included 10 different topics. The table below lists the topics named by the respondents. Considering the time span of the research, the project provided an average firefighter with a training opportunity at least once a year, not counting the refresher sessions.

The trainings have significantly improved the firefighters' access to skills development opportunities. As the trainings were free of charge, they allowed for inclusion of firefighters working at units in the toughest financial situation.

RESPONDENTS' ASSESSMENT OF TRAININGS' UTILITY AND APPLICABILITY

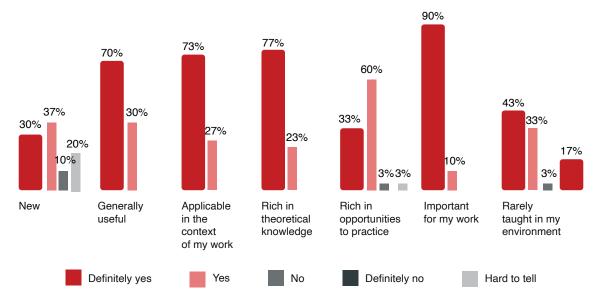
The survey aimed at providing an insight into knowledge retention, respondents' perceptions of its utility and their declarations as to its application. Since many respondents took part in more than one PCPM training, they were asked to assess only how well they remembered the training they remembered the best. The respondents were asked to use a scale from 1 to 5, where 1 indicated no memory of the training and 5 full knowledge retention. Their average grade was 4.5, and more than half of them graded their knowledge retention at 5. Only one respondent picked a grade below 4. She took part in one training only (in rope rescue), and declared she remembered it rather poorly (at 2 on the 1-5 scale). Nonetheless, she was able to give a recent example of the rope rescue skills application in a rescue action she participated in. Her example is telling: beneficiaries who took part in fewer training sessions may have less confidence as to their new skills. Nonetheless, even they – just like the respondent in question – may apply at least a part of their learnings in their daily work.

The respondents were asked in an open question what part of the training they found most useful. The respondents typically answered it by listing topics they found of most use. Topics mentioned most often included: rope rescue, USAR, HazMat, first aid, leadership, and RTA. 5 respondents, apart from naming a topic, stressed that the opportunities to practice the skills taught during the training were especially valuable to them. A similar share pointed to the positive impact of the activities on their stations or the fire system in Kenya, by stressing that the training of trainers allowed them to build capacities of whole teams, or that the work on firefighters' skills recognition contributed to higher professionalism of the service nationwide.

Each respondent was also asked if they recalled when they applied any piece of knowledge or skills taught in the training the last time.

TABLE 6. ANSWERS TO QUESTION:

"How would you assess what you have learnt during the training? How far do you agree with the following descriptions of skills and knowledge you gained through the [PCPM] training?"



The answers ranged from "today" to "a couple of months ago", and about one third of respondents declared they used the skills daily. Every respondent declared they used the skills at some point in time and was able to give an example of such application.

Application of skills and knowledge depended not only on knowledge retention and confidence of the trainees, but also on the typical emergencies in the area where they were stationed. Based on the respondents' declarations, fires of high-rise buildings happened once or twice a year, rope rescue skills came in handy several times a month, RTA and general firefighting skills were put to use every week.

All respondents agreed that the training impacted not just themselves, but also their teams. In their answers (the question was open) they pointed to new skills and higher professionalism, better leadership and teambuilding, higher morale and self-confidence, higher efficiency of rescue actions, better management of rescue equipment and public recognition. The table below presents a categorization of the answers along with frequencies of each category of replies.

The kinds of impact on teams and teamwork listed in the table tended to reinforce one another. Higher efficiency boosted confidence, and self-confidence helped broaden the scope of application of the new skills. Better functioning teams also meant better relationships with local communities. Raised morale translated also to the less spectacular, but nonetheless very impactful, changes such as better maintenance of firefighting equipment and, thus, lower maintenance costs. Below, the respondents' answers are cited. Their opinions are grouped by the categories listed in the table 7.

IMPACT ON TEAM	# RESPONDENTS	% RESPONDENTS
Higher efficiency of rescue actions	12	40%
Higher morale and self-confidence	9	30%
New skills, higher professionalism	4	13%
Better leadership, team building and team management	4	13%
More effective management of rescue equipment	3	10%
Public recognition	2	7%

TABLE 7. IMPACT OF THE TRAINING ON RESPONDENTS' TEAMS: CATEGORIZATION OF OPEN ANSWERS

Higher efficiency of rescue actions:

 ∇ They [the trainings] are very impactful. When we encounter tough situations, we know what to do. We don't lose time to figure it out. Firefighter, M, 8 years of experience

 \Im Thanks to the training, we can use rope techniques that before weren't available to us, which makes us better firefighters. Firefighter, M, 14 years of experience

 \mathcal{D} We learn a lot and it is possible now to help people better. Even when we are missing the needed equipment.

Firefighter, M, 6 years of experience

Higher morale and self-confidence:

 $\mathcal{P}\mathcal{P}$ I had an opportunity to share my knowledge from the PCPM training with my firefighters and I can see they gained a lot from it. My team is new and this knowledge gives them so much needed confidence.

Firefighter, M, 13 years of experience

Definitely, our morale gets busted thanks to the PCPM support. Our skills get better. So much better that, in the national level rescue competitions, Isolo [our county] took 3rd place in the whole Kenya. Something that before our collaboration with PCPM couldn't happen, since we are a northern county, with less possibilities to develop our department. Firefighter, M, 9 years of experience

New skills and professionalism:

PCPM has changed our approach to firefighting by 100%. Both trainings and the possibility to meet other firefighters [brought about this change]. Not only we learn a lot, but also we network and build capacities to cooperate in big accidents. SOP [Standard Operating Procedures] is also huge impact on how we work. It gives us a possibility to cooperate on level that before was unreachable.

Firefighter, M, 10 years of experience

Better leadership, teambuilding and team management:

 \Im Especially the ToT has impacted the quality of our leadership. By teaching others (with the skills from the ToT), I build my position as the commander and I can provide better help to people in need.

Firefighter, M, 4 years of experience

 ∇ 100% yes. Our tactic is based almost fully on things learned from PCPM trainers. Firefighter, M, 9 years of experience

More effective management of rescue equipment:

 ∇ It is very hard to secure new equipment because of our financial situation right now in the county. Also bureaucracy is a problem. Thanks to hose repair training we are self-sufficient.

Firefighter, M, 33 years of experience

 ∇ Time of our response became significantly better. Also we are much better at maintenance of our tools. And there is huge change in attitude of firefighters. They have become more committed to their work.

Firefighter, M, 11 years of experience

 ∇ I agree that those trainings impact strongly my station. Both skills and morale. My firefighters become very proactive. These days, they are able and willing to repair and maintain the little equipment that we have in our fire department. It greatly cuts cost of operation. Firefighter, M, 17 years of experience

Public recognition:

 $\nabla \nabla$ Yes the impact is already huge. The trainings have positively impacted our skills and confidence. Also residents of county are very happy about our performance. [The county] Authorities appreciate our work and our cooperation thanks to that very much.

Firefighter, M, 34 years of experience

TABLE 8. CATEGORIZATION OF REASONS FOR SATISFACTION

REASON FOR SATISFACTION	# RESPONDENTS	% RESPONDENTS
Own professional development	14	47%
Institutional development	8	27%
Training quality	7	23%
Application of skills and knowledge	5	17%

As pointed out earlier, many of these examples show that one type of positive impact tends to trigger other changes for the better. Moreover, the respondents' answers show that, in many cases, these positive impacts changed the firefighters' work and social position qualitatively. Namely, application of new skills and knowledge led the respondents, not so much to perfecting what they had already done, as to entering new fields of rescue activity; public understanding of their jobs and local authorities' recognition was new to them; as was the feeling they were good at their jobs.

SATISFACTION LEVEL AND REASONS FOR SATISFACTION

The respondents were asked to use a 5-point scale to grade their overall level of satisfaction with the PCPM trainings. 5 was the highest, and 1 the lowest grade. The average result in the sample was 4.77, with 4 as the minimum grade. None of the respondents was undecided about their answer or dissatisfied with the training.

Their reasons for satisfaction can be divided into 4 categories, with the most answers centering around the trainees' own professional development. Development of their station or fire response institutions in Kenya, trainings' quality or successful application of skills and knowledge were further reasons for satisfaction.

Respondents whose answers were centered around their own professional development, indicated various kinds of gains from the training, including new skills, more self-confidence, a sense of work-related fulfillment or recognition of the local community. One of the respondents pointed to the fact that without the PCPM training he would have very little opportunity to develop his skills. Another, shared that the training had given him a chance to improve his work position.

 $\mathcal{P}\mathcal{P}$ It brings us somewhere. We learn new technics. We develop. We become proud of ourselves thanks to the PCPM and CFOA trainings.

Firefighter, M, with 33 years of experience

 $\mathcal{D}\mathcal{D}$ For a poor fire department, having a scholarship [a free training] is very important. We can take part in trainings, which we normally couldn't afford. Also, trainings are full of both practical skills and theoretical knowledge. Firefighter, M, with 8 years of experience

 $\mathcal{D}\mathcal{D}$ Those trainings opened my eyes. No other institution form us in ways in which PCPM and CFOA did. The possibility to get a [training] certificate gave me a chance for a stable and well-paid work.

Firefighter, M, with 10 years of experience

 $\ensuremath{\overline{\sc p}}\ensuremath{\overline{\sc p}}$ Once I come back from training I see that my professionalism is seen by the [local] community.

Firefighter, F, with 10 years of experience

Respondents whose reasons for satisfaction referred to institutional development pointed to the ability of their stations to respond better to the local needs, increased interest of local community members in becoming a firefighter, or development within the structure of the Kenyan fire system. One of them also stressed the importance of the continuous character of the support provided by the Polish Aid-PCPM projects. \mathcal{D} We are trained in practical skills which answer our local problems. Also we get information, which other way would be very hard to get. Firefighter, M, with 27 years of experience

 $\mathcal{D}\mathcal{D}$ The numbers of firefighters is rising thank to that trainings. These trainings give us also the so much needed recognition, and, with that, come better work conditions and safer community.

Firefighter, M, with 34 years of experience

 \mathcal{PD} When I look back on my fire department before the trainings with PCPM, I can see a huge development of department. Also, the support of PCPM doesn't stop when a training ends. Firefighter, M, with 27 years of experience

 $\mathcal{D}\mathcal{D}$ Before training we didn't cooperate with other services such as ambulance or police. Now, we see pluses of synergy. And the PCPM trainings are a huge part of that change. Firefighter, M, with 11 years of experience

The answers centered around satisfaction from successful application of the learnings from the trainings put emphasis on the compatibility of these learnings with the actual requirements of firefighters' job:

 $\mathcal{D}\mathcal{D}$ The trainers are very competent, and the training content in 95% replies to actual needs, when we are on call.

Firefighter, M, with 8 years of experience

 $\mathcal{D}\mathcal{D}$ It answered the need of my station for skills in water rescue; we have a lot of such accidents. In some weeks, we have also even 3 calls requiring rope rescue and that knowledge of rope rescue is needed then. Firefighter, M, with 4 years of experience

A share of respondents said their main reason for satisfaction was simply the training's quality. By that they typically meant trainers' competence, training's structure or contents, its good organization, or integration of the trainings in a broader framework of support offered as a part of the project. Here are a few examples of such opinions. ∇ That trainings are standardized. And the trainers are very professional and supportive. Firefighter, M, with 9 years of experience

 $\mathcal{D}\mathcal{D}$ It is done timely and very efficiently. Also, the assistance of PCPM staff is great. Also we can count on continuous cooperation with PCPM, which is a great advantage. It builds trust.

Firefighter, M, with 17 years of experience

 $\mathcal{D}\mathcal{D}$ The people who train us are not only specialist, but also they love what they do, and this energy is contagious.

Firefighter, F, with 7 years of experience

TRAININGS' IMPACT SUMMARIZED

The results of the survey point to two key impacts of the Polish Aid-PCPM trainings: improved access to firefighting training on the one hand and the high practical value of the trainings (high knowledge retention, utility and applicability). The research points also to indirect positive influence of the trainings on fire brigades operations as well as firefighters' morale and perception by local communities. These results should be analyzed in the context of other research, especially the earlier monitoring data, the 2018 needs assessment and the 2023 results of surveys with heads of fire brigades.

In 2022 and 2023 the project team introduced monitoring tools to assess the training needs and results. A pre-training survey was distributed among all the prospective trainees to learn more about how they assessed their skills and knowledge and what they thought they still needed to learn. Each training was also followed by a satisfaction survey distributed to all trainings' participants. The decision to take the pre-training surveys results into consideration when designing training curricula brought about positive results visible in the satisfaction surveys as well as in this impact assessment. The training courses responded to the beneficiaries expectations and, thus, the takeaways had better chances of being applied in the firefighters' daily work. The 2022 and 2023 post-training show high satisfaction of the trainees. A 5 step scale (with 5 being the highest grade) was used in the questionnaires to assess their satisfaction level and open questions were asked to learn more about the possible reasons for dissatisfaction. Scores 4 and 5 typically account for 90% of answers to questions about satisfaction, and in case of training on RTA, search and rescue and PLAR, as well as the 2022 training of trainers, for 100% of answers.

Negative feedback in the post-training surveys was rare and diversified. It focused on organizational matters rather than trainings' content. Examples of a typical negative feedback to face-to-face training organizaiton may be: a request for an additional meal (ToT), complaint about last-minute changes to a training's timetable (first aid training), and complaints about insufficient equipment allowing the trainees to practice only in turns (rope rescue and HazMat). Criticism towards the online training included reports on technical problems with the internet connection, and complaints of too long or too short duration of the training considering the amount of information covered (LEV 3).

The results of the post-training monitoring surveys are consistent with the results of this impact assessment. Most importantly, the negative feedback to the training (which was absent in the impact assessment) does not touch on matters related to utility and applicability of skills and knowledge taught during the sessions. This allows us to treat the results pointing to high knowledge retention, utility and applicability as credible.

The 2018 needs assessment allows us to contextualize the observations on accessibility of training. The Chief Fire Brigade Officers participating in the survey were asked then about the date of their last training. Half of them answered "this year" and the remaining 50% indicated an earlier date. These results are similar to the declarations of the respon-

dents in this survey (50% of them said they participated in a training, PCPM courses excluded, at least once a year, and the other half said they did it once every few years) and suggest that, over the last 5 years, availability of firefighting trainings (apart from the Polish Aid-PCPM offer) has not improved significantly. The positive impact of the Polish Aid-PCPM projects on training availability can also be treated as a reliable result.

Considering the 2018 assessment's as well as the 2023 workshop's results, better access to quality training opens a path for professional development. The authors of the assessment wrote:

 ∇ None of the fire brigades formulate and possess clear staff development policy. In few cases, the CFOs base on the National Government for public servant policy, which seems to be inadequate to apply in the emergency service. When they were asked how in this case the officers have the possibility to rise in rank the most popular answers were:

- long service experience;
- observation of personnel performance;
- through the training, no procedures;
- depends on management approval;
- management or administration appointment.⁶

The 2023 workshops results largely confirmed these observations. The participants pointed to lack of a clear career path and lack of motivation to work as a persistent challenge within the Kenyan fire system. In these conditions, opportunities to develop individual capacities may also help firefighters find more meaning and satisfaction in their work.

⁶ Firefighters Training in Kenya: Needs Assessment and Training Curriculum, Rafał Własinowicz (ed.), PCPM 2019, p.32.

OPERATION AND MAINTENANCE: MONITORING VISIT AT FIRE STATIONS

In the first half of December 2023, monitoring visit were conducted at four fire stations which received in-kind assistance or infrastructural aid. The aid was provided between 2016 and 2023. Its value ranged from several thousands of US dollars to over 170 thousands US dollars. The table below lists the kinds of equipment and infrastructural improvements financed from the Polish Aid funds at each of the stations.

The aim of the monitoring visit was to check whether the items and facilities listed were still present and in good condition, as well as whether they had been used and maintained by the stations. Finally, the visitors asked about the impact of the aid on the functioning of each of the fire units.

The monitoring visit were conducted by PCPM staff: two persons were delegated to

each location. The stations were informed about the research and its objectives. Each control visit was divided into two stages. The visitors started with an interview with the Chief Fire Officer (CFO). Later, they inspected the station with one of the frontline officers, asked additional questions, as well as examined and photographed the equipment or infrastructure financed from the Polish Aid-PCPM projects.

RELEVANCE AND QUALITY OF AID PROVIDED

All of the CFOs interviewed assessed the in-kind assistance delivered as relevant to the station's needs and of satisfactory quality. They also evaluated the cooperation with PCPM positively. The table below recounts the declarations of each of the respondents.

FIRE STATION DETAILS	YEAR OF DONATION	AID PROVIDED	VALUE OF AID PROVIDED IN USD (ROUNDED UP TO USD 100)	DATA OF VISITATION
Kyumbi fire station Machakos County	2022 2023	Construction of a fire station and equipping the station	123,300	11.12.2023
Nakuru Fire Station, Nakuru County	2018 2019	Rope rescue equipment, personal protection equipment, hose repair kit	9,100	
Murang'a Fire Station, Muranga County	2015 2016 2017	Fire hoses, air compressor, gas detectors, high- pressure nozzle, power saw, harnes- ses for rope rescue, Fire Brigade Rapid Intervention Vehicle	48,000	
Makindu Fire Station, Makueni County	2021 2022	Fire hoses, Road Traffic Accident Rescue Vehicle: Isuzu D-Max with Metal Equipment Co. overstructure and rescue equipment New fire station constructed	175,400	9.12.2023

TABLE 9. STATIONS VISITED AS A PART OF THE IMPACT ASSESSMENT

		MACHAKOS	NAKURU	MURANGA	MAKUENI
•	Was the aid provided to your station relevant to its needs?	Definitely yes	Yes	Yes	Definitely yes
•	Was the aid provided to your station of satisfactory quality?	Definitely yes	Definitely yes	Yes	Definitely yes
•	Have you felt treated with respect by PCPM staff and representatives?	Definitely yes	Definitely yes	Definitely yes	Definitely yes
•	Do you feel you had an influence on the aid provided?	Definitely yes	Definitely yes	Yes	Definitely yes
0	Did you feel well informed about how to contact PCPM in case you wanted to share your feedback or file a complaint?	Definitely yes	Yes	Yes	Definitely yes

TABLE 10. RELEVANCE AND QUALITY OF AID PROVIDED AS ASSESSED BY FIRE CHIEF OFFICERS

Overall, the assessment of the CFOs was very positive. Two of them decided to add an additional comment on the quality of cooperation with PCPM:

 ∇ I can say that during the implementation of this project we were given time and the opportunity to participate in the design by PCPM's staff and we were able to cooperate in a positive manner. Everybody was able to participate... ...We could play an important role in the whole process.

Urbanus Kioko Kyalo, Chief Fire Officer, Makueni County

 $\mathcal{D}\mathcal{D}$ The support provided by PCPM was of high quality. It was given to us after consulting our then Chief Fire Officer. The support matched our needs.

Chief Fire Officer, Nakuru County

All CFOs pointed to further needs of their stations and the head of the Nakuru station requested a more frequent contact with PCPM, which had been, till date, largely mediated by CFOA. At the time of delivery, all equipment delivered to each station was fully functional. Also, the quality of the infrastructural improvements carried out at the stations of Machakos and Makueni was high, according to the CFOs. They said the new facilities had been useful, durable and invited a positive attitude of local communities to firefighters.

Most importantly, the aid corresponded to the needs of the stations, which is clear not only from the already cited declarations of the CFOs, but also from the respondents' account of the uses of the new equipment and facilities.

 ∇ There was nothing. The nearest fire station was in Wote (75 km from this place). The response time was very long. Saving life and properties was not possible. Because of that, the relationship between the fire service and the local community was bad. Now, we have a useful building, which allow us to respond to the calls fast and ensure a good working environment.

Urbanus Kioko Kyalo, Chief Fire Officer, Makueni County

		MACHAKOS	MAKUENI
o	High standard of materials and works execution	Definitely yes	Yes
0	Affordable maintenance cost	Definitely yes	Yes
0	High utility of the improvements for the daily functioning of the firefighting unit	Definitely yes	Definitely yes
0	Durable effect	Definitely yes	Definitely yes
٥	Positive impact on how the unit is perceived by the local com.	Definitely yes	Yes

TABLE 11. INFRASTRUCTURAL IMPROVEMENTS QUALITY ACCORDING TO THE CFOS OF MACHAKOS AND MAKUENI

PRESENCE, CONDITION, MAINTENANCE

All but one piece of equipment and infrastructure were present, complete and in good to very good technical state on the day of the visit. All stations also declared they bore full responsibility for and the main share of costs of their maintenance. The costs were typically shared with the respective County Governments. The one piece of equipment which was no longer functional was a power saw used by the Murang'a station. According to the station's frontliner, the saw was damaged during an intervention requested by Kenya Power, and had not been repaired yet as spare parts were unavailable in the local market. At the time of the interview, the saw had been out of service for the last two years. Moreover, despite the good technical state, some pieces of equipment, one air compressor (at the Nakuru station) and 5 gas detectors (at the Murang'a station), were out of use for challenges related to powering (explained further).

The CFOs declared that maintenance requirements and costs had been till date negligeable in the case of most of the equipment and facilities. This concerns mainly office furniture or other non-firefighting equipment supporting the functioning of the stations, where the main maintenance requirements was cleaning and the main cost: electricity. The facilities are still relatively new, and minor repairs can be handled by the stations. None of the interviewees named maintenance of the equipment or facilities financed from the project as unaffordable for their stations, although it was clear the stations' budgets were often too tight and expenses were made according to priorities.

 $\mathcal{D}\mathcal{D}$ The condition of the building is good. There are no leaks from the roof and we don't feel any disappointment. Except for doors: the wooden doors are in bad condition. Compound cleaning takes place daily. Users made it more efficient by good organization of equipment and furniture and equipping buildings with necessary resources.

Grace Mutua, Firefighter, Makueni Station

It should be stressed that some pieces of equipment, such as the hose repair kit, or the newly built facilities, supported proper maintenance of the equipment at the disposal of the stations rather than created additional costs. This concerns mainly the repair tools and buildings (protecting equipment from weather conditions and theft). During the interview, the CFO of Nakuru station emphasized that the hose repair kit was not only used by his station, but also served a neighboring fire station when needed.

Out of the four stations visited, the Murang'a County station excelled in maintenance as the management allocated a maintenance budget for vehicles and smaller pieces of fire equipment (two separate budget lines, based on the CFO's declarations). Both Murang'a and Makueni stations also ensured that their vehicles were covered by insurance.

The following operation and maintenance challenges were identified during the visitations:

- (The already mentioned) broken power saw at the Murang'a station, out of service for the last two years. The station has other saws out of service for the same reason: spare parts are difficult to find in the local market.
- Unused, though functional, air compressor at the Nakuru station. The station did not have access to three-phase electricity. The problem was described by the station's CFO as temporary and resulting from unintentional damage. The station had been waiting for 6 months for technical support from Kenya Power at the moment of the interview.
- Gas detectors were out of use at the Murang'a station due to unavailability of matching batteries in the local market. The challenge was partly solved on the spot by the PCPM visitor on the spot, who confirmed batteries' specification for the gas detector model.
- Missing manuals to gas detectors and the air compressor were mentioned by the Murang'a station CFO and frontline firefi-

ghter. Despite the missing manuals, the station has so far managed to use and maintain the equipment. The manual to the breathing apparatus compressor was also missing at the Nakuru station. So far, the compressor has not required any maintenance. However, we are not sure when a change of oil and filter is due since we do not have the user manual, explained the station's frontliner.

 Wooden doors installed at the new Murang'a station were described as of low quality by both the CFO and the frontline firefighter. The visitor confirmed their assessment.

The challenges observed were minor and showed that smaller-value pieces of equipment tended to be deprioritized in the maintenance budgets. This may mirror a coping strategy of the generally underfunded stations, whose managers may tend to allocate the little money they have at their disposal to maintenance of vehicles, fuel and electricity, and assign a lower priority to non-firefighting equipment or items of lower value, especially if applied less frequently. Most likely, all the challenges listed could have been tackled if the communication between the PCPM team and the beneficiaries had been more regular and centered more around the uses of the aid provided. Simple monitoring solutions to this challenge should be sought, taking into account the already significant workload of the project staff.

The CFO of the Machakos station said during the visitation interview that, following the construction of the new station, more firefighters have been employed there by the county government. The interviewee believed that the aid provided has mobilized the county to direct more funding to the station. The CFO of the Makueni station said the costs of fencing of the new station and installing elevated water tanks were also covered by the county government. While such effects of aid cannot be taken for granted, this example shows county governments may significantly contribute to the project's positive impact and sustainability.

USES AND IMPACT

The uses of equipment donated show that the fire brigades undertake complex and demanding rescue actions. For instance, the CFO of Makueni gave recent examples of actions involving an LPG tanker, rescue during a flood, and grave traffic accidents; and the CFO of Machakos mentioned an accident involving a fuel tanker and fire interventions in densely populated and difficult to reach shanty towns. The Makueni station also used the equipment to build a better relationship with the local community through fire prevention activities. The Makueni frontline gave additional examples of the uses of the equipment:

Since we got this equipment it is used to respond to RTA accidents, do the extrication and offer first aid. Crew is well trained in using the vehicle and all equipment. The most useful tools are hydraulic spreader and reciprocating saw. Equipment is complete and generally in good condition. Equipment is serviced up to requirements and tested weekly.

Grace Mutua, firefighter, Makueni Station

The equipment donated as part of the project has been often used by more stations than the one to which it had been donated. One example has been already given in the previous section: the hose repair kit belonging to the Nakuru station has been used at the Naivasha station to help maintain their equipment. Another example comes from the Murang'a station. Its air compressor has been used to support firefighter training, and has been also frequently borrowed by three other fire stations. As the Murang'a frontliner explains:

 ∇ Every week, firefighters are training at the Pioneer University on marine safety. There, the 10-15 BAs [breathing apparatuses] are used. [Other counties:] Nyandarua, Laikipia and Kirinyaga are using our air compressor, too. Caroline Kiarii, firefighter at Murang'a station

 $\mathcal{D}\mathcal{D}$ Running the station required some costs: providing elevated water tanks, fencing the area.

Urbanus Kioko Kyalo, Chief Fire Officer, Makueni

The biggest impact has been made by the highest value aid, the new stations and vehicles, which allowed the brigades to limit the response time. Until the 24th January 2024, the Machakos unit responded to 25 road traffic accidents, 7 fires and 1 water rescue case.

In Machakos the response time in some locations dwindled from over 40 minutes to a few minutes. The CFO gave the following examples of recent rescue actions: a drowning incident 2 kms from station (3 minutes response), road accident at Konza city where a fuel tanker caught fire in driver cabin (6 minutes response, a nearby housing area caught fire 600 meters from station (3 minutes response). If the firefighters were to reach these locations from the used-to-be nearest station (16 km away), they may have arrived too late.

During the interview, Boniface Muema, the CFO of Machakos, named faster response and, thus, "more lives saved" (to use his words) as the main impact of the aid provided. He added the local community consider the station their own as many of them were involved in construction works. Some of the facilities are also occasionally shared with the local community for other purposes, which strengthens their good relationships and facilitates better awareness of fire safety. According to Muema, "the station has set a standard in terms of future station development-optimization". The station is integrated with a medical facility, allowing for better alignment of rescue actions by different first responders. Finally, following the construction works, more firefighters and staff have been employed by the county government. The interviewee believed the works have mobilized the county to direct more funding to the station.

As mentioned earlier, the firefighters from Makueni were previously stationed in Wote, 75 km away from their new location. They used to be unable to respond to many of their calls in time. In the interview, the CFO of the station listed the benefits of the new location: $\mathcal{D}\mathcal{D}$ The main impact has been to allow quick responding to emergencies. We are now also able to provide training and have a usable working place. We have built a high level of confidence in local people, especially along the highway.

Urbanus Kioko Kyalo, Chief Fire Officer, Makueni County

IMPACT SUMMARIZED

The monitoring visits confirmed that the in-kind and infrastructural investment aid was present at the stations. In majority of cases, it was in good condition and in constant use. The beneficiaries were also highly satisfied with the aid provided and pointed to its significant impact on the functioning of their brigades. Aid of higher value (vehicles and stations) tended to be more impactful as it typically shortened the response time. Nonetheless, no piece of aid was assessed as unneeded or useless, and the interviewees also agreed that the lower value aid increased efficiency of their regular operations.

The maintenance challenges identified through the monitoring visits were explained by the beneficiaries with unavailability of spare parts in the local market. To confirm validity of this explanation, the brigades' operation and maintenance practices would require a closer examination. Perhaps a slight change to the practices could bring about fuller sustainability of the in-kind assistance provided. At the same time, the visitations point to possible flaws of the handover of the aid and insufficient stress put on maintenance (lacking user manuals). At the same time, some of the aid provided (repair kits) tended to limit the brigade's maintenance costs or mobilize county governments to deliver more support. Overall, the aid was highly appreciated by the beneficiaries, especially when its scope covered training, equipment and infrastructural improvements. Grace Mutua, firefighter of Makueni which received such comprehensive support explains: I feel confident working here. I am able to use all the equipment because of training. Also because of support we are proud to have this knowledge and offer service to the community.

CONCLUSIONS AND RECOMMENDATIONS

The research provides evidence as to the relevance and practical utility of the Polish Aid-PCPM support to Kenyan firefighters over the last decade. Fire experts, heads of fire brigades and frontline firefighters pointed to a number of positive impacts of the projects, including more efficient rescue operations, improved teamwork and increased morale. The positive impact was reported most often with regard to the following types of rescue actions: road traffic accident, tactical firefighting, search and rescue, rope rescue and fire prevention. The research participants recognized also the institutional achievements of the projects, namely improved access to accredited firefighting training and the projects' contribution to the development of competencies recognition system.

The positive impact of the projects has been most likely strengthened by their complementarity to the increased public support to firefighters in the form of regular subsidies, equipment and construction of stations. Between 2014 and 2023, only the number of stations has grown from 26 to 69. Two of them were built from the Polish Aid fund.

At the same time, the Kenyan fire system remains in need of further support. Regional differences persist. There are still counties without any fire stations, and most counties have only one. Some of the stations still lack the most basic equipment such as PPE. Fire experts participating in the evaluation workshops pointed to the need for decentralization of support, by which they understood the necessity to address the needs of smaller towns and counties with less developed fire systems. Similar concerns were also voiced in the survey with Chief Fire Officers (heads of fire brigades). Future development activities should address this challenge and ensure that support is directed to counties most in need. Another challenge related to the development of the fire system is related to maintenance. The aid provided can be assessed as largely sustainable as it has been applied and maintained. In some cases it has also mobilized an increase in support from county governments. More guidance on maintenance has been requested by some of the beneficiaries, which also evidences their determination to upkeep their increased technical capacity. Future projects should take these requests as well as the emergent maintenance challenges into account.

The positive results of this impact assessment should be attributed not only to PCPM and its partners, but primarily to the beneficiaries who have put the new skills, equipment and infrastructure to regular use. None of the pieces of equipment or information delivered as part of the projects would have saved any lives, but for their efforts to make the most of this support to the benefit of their communities. Their commitment to their work is an argument for increasing their involvement in future projects implementation to facilitate their ownership of the process as well as the results.

ANNEX 1: WORKSHOP WITH FIRE EXPERTS AND CHIEF FIRE OFFICERS: SCENARIO

PURPOSE

The workshop serves as an opportunity to gather experts' observations and opinions on the development of the Kenyan fire system. The workshop scenario covers 20 years of its development, spanning one decade in the past and one decade in the future. The thoughts of participants will serve as a measurement tool to check to what degree the PCPM projects were inline with the development priorities of the system. They will also allow PCPM to plan future interventions.

TARGET GROUP

Chief fire officers, fire experts, CFOA representatives, regardless of whether they belonged to the beneficiaries of PCPM projects.

LOGISTICS

For each workshop, we will need:

- A seminar room. The room should allow three groups of 7-10 people to work together at one table. Make sure there are enough tables and chairs. The room should also have an area by a wall where we could hang several poster-size paper sheets with blue tack;
- 3 flipcharts;
- At least 4 markers (3 blue or black for the participants, and 1 green for the moderator; let us avoid red);
- Blue tack;
- Coffee and snacks for a coffee break;
- Consent forms for recording the session;
- If participants consent to recording the session, also a video camera,
- Computer with a stable internet connection allowing a MEAL staff from the head office to follow the session;
- Small goodbye gifts for the participants.

One staff member should be delegated to record the session. One staff member should be delegated to take notes.

CONSENTS

Before the participants enter the workshop room, ask each one if they agree that the session is recorded. If yes, give them a consent form. Collect all consent forms before the participants enter the room. If any participants are against recording, the session cannot be recorded.

WORKSHOP SCENARIO/INSTRUCTIONS TO THE MODERATOR

1. Greet the participants, thank them for coming, and present the aim of the workshop: to discuss the last 10 years of development of the Kenyan firefighting system. Explain the session has been organized by the Polish Center for International Aid (PCPM) and that it is also to help PCPM learn more about the impact of our projects. Make sure everyone in the room agrees to take part in this exercise (e.g. Do you have any questions? Is everybody ok with taking part in the workshop? Shall we start?).

2. Unless you already know the participants and they already know each other, ask them to briefly present themselves providing the following four pieces of information: name, position, town/city, how long they have worked as firefighters. Unless the participants already wear name badges, give out stickers or paper tape where

- 3. Propose the contract for the meeting, including the following rules:
- We are all equals here and everyone can share their opinion.
- We speak for ourselves and not for everyone or anyone else.
- We do not judge one another or comment on other people's opinions.

- There's a lot of us here so we try to squeeze what we have to say into reasonable time.

- We don't interrupt unless someone is talking very, very long.
 - The rules should be written down on a flipchart or whiteboard

4. Ask the participants if they agree and if they would like to add a rule. If everyone agrees, include it in the contract.

Points 5 to 9 should take 45-50 minutes:

5. Divide the participants into three groups. You can ask the group to count one by one from 1 to 3 to make the process easier.

6. Assign a time period to each group: You're all fire fighters in Kenya. The "ones" are traveling back in time to 2013-2014. The "twos" are staying in the now, the year is 2023. The "threes" are traveling to the future, for them the year is 2033.

7. Ask each group to pick a person who will be taking notes for the whole group.

8. Each group will be given the same assignments, but will be asked to complete them with respect to their time. The assignments are:

Task 1. "Challenges": Think of the year your team is working on. You are all in charge of firefighting teams, stations, brigades. What are your main management challenges? Name as many challenges as possible (no less than 5), explain what resources are needed to respond to them effectively (this may include people, skills, knowledge, equipment, forms of collaboration, etc.). (10 mins). So that the groups remember what year it is for them, please ask them to write the year on top of the sheet.

Ask the groups to divide the paper sheet into two columns. Introduce the tasks step by step. Firstly, ask the participants to list the challenges on the left side of the sheet. Once they are done (hopefully in 5 minutes), please ask them to list the resources in the right column.

CHALLENGE	RESOURCES NEEDED TO RESPOND TO IT

Tip for the moderator: You can draw the top row and the contours of the columns of the table on the flipchart.

 Task 2. "Recommendations for Aid Organizations": Think of the year your team is working on. Considering the aid provided to fire brigades in Kenya, what kind of support do you think works/worked/will work best/would have worked if provided? Provide 5 recommendations to aid organizations on how to support firefighters and the fire system's development best. The recommendations may refer to the type of aid needed, but also quality and modalities of cooperation. (10 min) The moderator can ask each group if a recommendation is formulated based on their experience or not. If yes, he can put a star by the recommendation.

Tips for the moderator:

• Each group should use a new sheet of paper for the task. In case the group does not feel confident with the flipchart, you can encourage the group to use it for the task by drawing a template for the notes. It can only suggest that there should be five recommendations and look like this:

1. 2. 3. 4. 5.

 Workshop participants may tell you they did not have enough time to complete the task. Please tell them not to worry as the tables will be later discussed with all participants of the workshop and amended if needed.

9. Ask the participants to hang their notes on one of the walls and invite them to take a look at the results of the exercises. After a few minutes, invite them to a break.

BREAK (10 MINS)

Tasks 10-11 should take about 50-60 minutes:

10. Ask each group to designate a leader to present the results for the common discussion.

11. Ask the participants if they feel anything should be added to the lists. Add the additional points to the list.

12. After a task has been presented, read out loud item by item on the list, each time asking the listeners to raise or clap their hands if they identify with what has been observed. This way you can identify the points which best describe their fire brigades in each period. Mark the points which raised the most support with your marker (you can circle or underline, or mark them in another way).

13. After the presentations have been completed, thank the participants and close the session. A PCPM staff will give them some small goodbye gifts.

ANNEX 2: QUESTIONNAIRE FOR CHIEF FIRE OFFICERS

INTRODUCTION

Polish Center for International Aid (PCPM) would like to thank you for the years of common work on development of the Kenyan firefighting system. We would like to invite you to take part in a survey aiming at identifying strengths, needs and future development paths of Kenyan firefighters. The survey will help us evaluate our work done so far, and plan future projects.

The share this survey with heads of fire brigades with whom we have cooperated. The survey covers nearly 10 years and therefore it may require time and, possibly, some consultation with other members of your fire brigade. We assess completing the survey should take up to 40 minutes.

We appreciate honest feedback. Whether you are satisfied or dissatisfied with our work, your feedback can help us do it better. The data is confidential: only us and our donor will have access to the full database. The data may be shared with researchers for academic purposes, but only in the anonymized version.

The survey is fully voluntary. It is not a registration tool for any kind of support and has no impact on your eligibility for future support. It is an evaluation tool: it will help us understand if we are doing our job right.

We would like to thank you for your time and all the information! If you agree to take part in the research, below you will find the questionnaire. We would like to ask you to deliver the filled out questionnaire to us in paper (you can hand it over to one of our staff during the Institutional Development for Fire and Rescue Service Profession and Practice conference) or via email.

QUESTIONNAIRE

Section 1: About the respondent(s)

Name of the respondent(s): You can complete the questionnaire with any of your staff members whom you may find helpful. Position(s): Brigade's name and location(s): Brigade's year of establishment: Phone number:

Do you agree that we contact you about this survey if we have any additional questions? \Box Yes \Box No

Section 2: Capacities

In this section we would like to ask you about the human and technical capacities of your fire brigade. Have they improved or deteriorated in the last decade? What were the main factors contributing to a change? If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed instead in the tables below.

1. How much equipment did your fire brigade have at its disposal in 2013? What are the figures for November 2023? Fill out the table below:

	DECEMBER 2013 /*	NOVEMBER 2023
Fire stations Provide number and locations	Number: Locations:	Number: Locations:
Fire engines Provide number	Number:	Number:
Break in gear Estimate sufficiency	□ Absent □ Present but insufficient □ Sufficient	 Absent Present but insufficient Sufficient
Personal protection equipment (PPE) Estimate sufficiency	□ Absent □ Present but insufficient □ Sufficient	□ Absent □ Present but insufficient □ Sufficient
Communication devices Estimate sufficiency	□ Absent □ Present but insufficient □ Sufficient	□ Absent □ Present but insufficient □ Sufficient
Other equipment If relevant provide name and number of equipment and estimate sufficiency Other equipment	□ Absent □ Present but insufficient □ Sufficient	□ Absent □ Present but insufficient □ Sufficient
Other equipment If relevant provide name and number of equipment and estimate sufficiency Other equipment	□ Absent □ Present but insufficient □ Sufficient	□ Absent □ Present but insufficient □ Sufficient
Other equipment If relevant provide name and number of equipment and estimate sufficiency	□ Absent □ Present but insufficient □ Sufficient	□ Absent □ Present but insufficient □ Sufficient

* If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed in the table instead.

2. How many firefighters were there in your fire brigade in 2013? What are the figures for November 2023? Fill out the table below:

	DECEMBER 2013 /*	NOVEMBER 2023
Firefighters – men Provide number	Number:	Number:
Firefighters – women Provide number	Number:	Number:
Firefighters below 30 years of age Provide number	Number:	Number:

* If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed in the table instead.

3. Below, we have listed capacities related to various firefighting tasks. Please, assess how capable your brigade was in each area in 2013 compared to now considering skills and knowledge of your brigade. On a scale from 1 to 7, where 1 means no capacity and 7 means expertise, please assess your brigades capacities in the firefighting. Focus on skills and knowledge only.

	2013/*	2023
Dispatch and control room	<u> </u>	<u> </u>
Emergency vehicle operation	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Fire prevention	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Fire science	<u> </u>	□1 □2 □3 □4 □5 □6 □7
HAZMAT	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Leadership and management	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Medical first response	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Road traffic accident	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Rope rescue	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Search and rescue	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Tactical fire fighting	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Water rescue	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Wildland fire fighting	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	□1 □2 □3 □4 □5 □6 □7
Other:	01 02 03 04 05 06 07	01 02 03 04 05 06 07

* If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed in the table instead.

4. Below, again you will find the same list of capacities related to various firefighting tasks. Please, assess how capable your brigade was in each area in 2013 compared to now considering your brigade's technical capacities (equipment at their disposal as well as capacity to operate and maintain it). On a scale from 1 to 7, where 1 means no capacity and 7 means expertise, please assess your brigades capacities in the firefighting. Focus on skills and knowledge only.

	2013/*	2023
Dispatch and control room	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Emergency vehicle operation	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Fire prevention	<u> </u>	□1 □2 □3 □4 □5 □6 □7
Fire science	<u> </u>	□1 □2 □3 □4 □5 □6 □7
HAZMAT	<u> </u>	
Leadership and management	<u> </u>	
Medical first response	<u> </u>	
Road traffic accident	<u> </u>	
Rope rescue	<u> </u>	
Search and rescue	<u> </u>	
Tactical fire fighting	<u> </u>	
Water rescue	<u> </u>	
Wildland fire fighting	<u> </u>	
Other:	<u> </u>	D 1 D 2 D 3 D 4 D 5 D 6 D 7

* If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed in the table instead.

5. Below, again you will find the same list of capacities related to various firefighting tasks. Please, indicate capacities which are most needed in the area where your fire brigade operates. Rate the capacities from "Irrelevant" to "Very relevant", based on the experiences of your fire brigade.

	2013/*	2023
Dispatch and control room	□ Irrelevant	□ Irrelevant
	□ Relevant	□ Relevant
	□ Very relevant	Very relevant
Emergency vehicle	□ Irrelevant	□ Irrelevant
operation	□ Relevant	□ Relevant
	□ Very relevant	Very relevant
Fire prevention	□ Irrelevant	□ Irrelevant
The prevention	□ Relevant	□ Relevant
	Very relevant	Very relevant
Fire science	□ Irrelevant	□ Irrelevant
File Science	□ Relevant	□ Relevant
	□ Very relevant	Very relevant
HAZMAT	□ Irrelevant	□ Irrelevant
ΠΑΖΙΜΑΤ	□ Relevant	□ Relevant
	□ Very relevant	Very relevant
	□ Irrelevant	□ Irrelevant
Leadership and management	□ Relevant	□ Relevant
	□ Very relevant	Very relevant
	□ Irrelevant	□ Irrelevant
Medical first response	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
	□ Irrelevant	□ Irrelevant
Road traffic accident	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
Rope rescue	□ Irrelevant	□ Irrelevant
Rope rescue	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
Search and rescue	□ Irrelevant	□ Irrelevant
Search and rescue	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
To otheral free feelings	□ Irrelevant	□ Irrelevant
Tactical fire fighting	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
	□ Irrelevant	□ Irrelevant
Water rescue	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
Wildland fire fighting	□ Irrelevant	□ Irrelevant
Wildland fire fighting	□ Relevant	□ Relevant
	□ Very relevant	□ Very relevant
Otherm		□ Irrelevant
Other:	□ Relevant	□ Relevant
		□ Very relevant

6. Would you like to comment on this section?

Section 3: Support received and its impact

7. Has your brigade received national governmental support or support from a county government since 2013? Please provide details in the table below:

	Total yearly value for 2013 /*	Total yearly value for 2023	Average yearly value in the years 2013-2023
Governmental financial support Please provide the total value of the yearly financing from this source for 2013 and 2023 as well as an average for the decade	□ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more	 □ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more 	□ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more
Financial support of county government(s) Please provide the total value of the yearly financing from this source for 2013 and 2023 as well as an average for the decade	□ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more	 □ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more 	 □ 0-5 million KES □ 5-10 million KES □ 10-15 million KES □ 15-20 million KES □ 20 million KES or more
Other forms of governmen- tal support in the decade of 2013-2023 If relevant, provide qualitati- ve description			
Other forms of support from local governments in the decade of 2013-2023 If relevant, provide qualitati- ve description			

* If your fire brigade had not existed yet in 2013, please cross that year out and put the year your fire brigade was formed in the table instead.

8. Has your fire brigade received any financial or in-kind assistance from non--governmental or international aid organizations? Please provide all sources of development aid received, including PCPM. Add rows to the table below if need be.

YEAR(S)	ORGANIZATION'S NAME	AID RECEIVED
		□ Financial grant □ In-kind assistance □ Training □ Other, specify:
		 □ Financial grant □ In-kind assistance □ Training □ Other, specify:
		 □ Financial grant □ In-kind assistance □ Training □ Other, specify:

9. Below, again, you will find the list of capacities related to various firefighting tasks. Please assess the impact of the aid received from various sources on the development of these capacities over the last decade or, if your brigade has been more recently established, since its establishment.

	Public support (from national or county government)	Aid provided by PCPM	Aid provided by other development organizaitons
Dispatch and control room	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Emergency vehicle operation	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Fire prevention	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Fire science	□ No impact □ Little impact □ Significant impact □ No relevant aid received	 No impact Little impact Significant impact No relevant aid received 	□ No impact □ Little impact □ Significant impact □ No relevant aid received
HAZMAT	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Leadership and management	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Medical first response	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Road traffic accident	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Rope rescue	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	 □ No impact □ Little impact □ Significant impact □ No relevant aid received
Search and rescue	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Tactical fire fighting	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received
Water rescue	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received

Dispatch and control room	 □ No impact □ Little impact □ Significant impact □ No relevant aid received 	□ No impact □ Little impact □ Significant impact □ No relevant aid received	 No impact Little impact Significant impact No relevant aid received
Emergency vehicle operation	 □ No impact □ Little impact □ Significant impact □ No relevant aid received 	□ No impact □ Little impact □ Significant impact □ No relevant aid received	□ No impact □ Little impact □ Significant impact □ No relevant aid received

10. Considering your current level of regular financing, is your brigade able to operate and maintain all the equipment received? Operation and maintenance includes costs such as, for instance, fuel, repairs and spare parts.

- □ Yes, fully
- \square Yes, mostly
- □ Yes, but only in smaller part
- □ No, not at all

11. Is your brigade able to provide training to your firefighters in order to keep their skills up to date?

- □ Yes, fully
- \Box Yes, mostly
- □ Yes, but only in smaller part
- □ No, not at all

12. We would like to learn more about the support provided by PCPM. Please mark in the table below how far you agree with the descriptions below:

THE SUPPORT PROVIDED BY PCPM	HOW FAR DO YOU AGREE WITH THE SENTENCES?
was relevant to our brigade's needs	Not at all 🗆 1 🗆 2 🖂 🖂 4 🗆 5 Fully
was of high quality	Not at all □1 □2 □3 □4 □5 Fully
was timely delivered	Not at all □1 □2 □3 □4 □5 Fully
created only affordable operation	Not at all □1 □2 □3 □4 □5 Fully
and maintenance costs	
created a durable positive impact	Not at all □1 □2 □3 □4 □5 Fully
was comprehensive	Not at all

13. Overall, how satisfied are you from the support provided by PCPM?

- a) Very satisfied
- b) Satisfied
- c) Dissatisfied
- d) Very dissatisfied
- e) Hard to tell

14. Would you like to comment on this section?

Section 4: Firefighters and local communities

We would like to know more about whether the way firefighters are seen by the local community has changed over the last decade. Mark to what degree you agree with the following sentences with respect to 2013 and 2023 using a scale from 1 to 5 where 1 stands for "definitely disagree" and 7 stands for "fully agree". If your fire brigade is younger than 10 years, change the year 2013 to the year of establishment of your fire brigade.

2013	3 /*	2023	
Firefighters were trusted by the local community: whenever we were needed, they called for our help	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	Firefighters were trusted by the local community: whenever we were needed, they called for our help	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
Firefighters were respected by the local community	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	Firefighters were respected by the local community	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
People didn't think they could count on us	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	People didn't think they could count on us	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
People knew we were doing our job the best we could	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	People knew we were doing our job the best we could	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
People understood that our job was dangerous	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	People understood that our job was dangerous	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
Fire engines called to emer- gencies were treated as priority vehicles by other motorists	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	Fire engines called to emer- gencies were treated as priority vehicles by other motorists	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
Reasons for delayed response were understood	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	Reasons for delayed response were understood	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
People wanted to be firefighters	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	People wanted to be firefighters	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
During rescue actions bystanders listened to our instructions	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree 	During rescue actions bystanders listened to our instructions	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
People readily took advice from us on fire safety	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	People readily took advice from us on fire safety	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
Firefighters felt appreciated by their employer	□ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree	Firefighters felt appreciated by their employer	 □ Definitely agree □ Rather agree □ Rather disagree □ Definitely disagree
An average firefighter salary allowed to make ends meet	 Definitely agree Rather agree Rather disagree Definitely disagree 	An average firefighter salary allowed to make ends meet	 Definitely agree Rather agree Rather disagree Definitely disagree

15. Would you like to comment on this section?

Section 5: Plans for the future

16. What in your view are the main challenges to your fire brigade and fire-rescue operations in the coming years? What resources (people, skills, knowledge, equipment, forms of collaboration, etc.) may be needed to effectively respond to them? This is an open question, but we would like to ask you to use the table below.

CHALLENGE	RESOURCES NEEDED TO RESPOND TO IT

17. Would you like to comment on this section? We are happy to learn more about your fire brigade. Feel also free to make any recommendations on our, PCPM's, work. Help us do our job better!

ANNEX 3: QUESTIONNAIRE FOR TRAINING PARTICIPANTS

INTRODUCTION

Hi, my name is XXXX and I am calling regarding your participation in a training for firefighters, financed by the Polish Aid funds and implemented by Polish Center for International Aid (PCPM) in cooperation with CFOA. We are now evaluating the project and trying to understand what worked well and what we could have done better. I would like to ask you a few questions about the training.

The survey is confidential, full data will be used by PCPM, CFOA and its donors only. Anonymized data may be shared with researchers for academic purposes if they consent to PCPM terms of data protection. The survey is fully voluntary and has no impact on availability of any future assistance.

The interview will take up to 15 minutes. Your honest feedback will help us improve our work in the future.

QUESTION LIST

1. Do you agree to take part in this short survey? Yes/No

If yes: Thank you very much! Your feedback is very valuable to us. First we would like to ask a couple of questions about yourself and your work.

- 2. What is your gender? M/F/Rather not say
- 3. How long have you been a firefighter? (open question)
- 4. Where is your fire station located? (open question)
- 5. Is firefighting your employment or voluntary work? Name all relevant answers
- a) Firefighting or providing expertise in firefighting is my regular work
- b) I engage in firefighting as a volunteer (without remuneration)
- 6. Considering all your employment in firefighting, how many days a week do you work?

7. What are your key work responsibilities as a firefighter? Name all relevant responsibilities

- a) participation in rescue actions
- b) supervising rescue actions
- c) team/detachment management
- d) training other firefighters
- e) office work, e.g. reporting

Now we would like to ask you about the training you participated in. We would like to know how well you remember it and if you found it useful in your work.

8. What were the subjects of the training(s) provided by PCPM in cooperation with CFOA that you took part in?

9. Think of the training that you remember best. On a scale from 1 to 5, how well do you remember this training? 1= "I hardly remember anything from the training", 5= "I remember the training very well"

10. Since the start of your employment, have you taken part in other (non-PCP-M/CFOA) trainings in firefighting provided by specialists outside your fire brigade or station?

- a) Yes, I take part in a training like that at least once a year
- b) Yes, I take part in trainings like that once every few years
- c) No, it was my first training of the kind
- d) I don't recall

11. Who covered the cost of the training(s) provided by other organizations/institutions?

- a) My employer
- b) Myself
- c) Another party
- d) Don't know/ Don't remember

I would like to ask you about the main training takeaways

12. Let us get back to the PCPM training that you remember best. How would you assess what you have learnt during the training? How far do you agree with the following descriptions of skills and knowledge you gained through the training?

	DEFINITELY YES	YES	NO	DEFINITELY NO	HARD TO TELL
New					
Generally useful					
Applicable in the context of my work					
Rich in practical content					
Rich in theoretical content					
Important for my work					
Rarely taught in my environment					

13. Could you tell us what part of the training you found most useful? (open question)

14. Do you recall when was the last time you applied any piece of knowledge you gained through the training? Could you tell us more about this situation? (open question)

15. How often do such situations happen in your work? (open question)

16. What are the types of emergency situations that you and your brigade typically respond to? Do the skills and knowledge gained through the training(s) provided by PCPM come in handy in these situations? If yes, how? Please give a few examples (open question)

17. Do you think your new skills will impact or have already impacted the team you work with and its capacity? If yes, please explain how. (open question)

18. Overall, how satisfied are you from the PCPM/CFOA training(s)? 1= "very dissatisfied", 5- "very satisfied"

- 19. What are your main reasons for satisfaction? (open question)
- 20. What could we do better in the future? (open question)

21. Would you like to add anything? (open question)

ANNEX 4: MONITORING VISITS

INSTRUCTIONS TO THE VISITOR

The questionnaire below should be filled out by a PCPM officer delegated to conduct the visitation. The fire station should be informed at least 2 days ahead about the visitation and agree that it is conducted. Before the meeting, the officer should fill out a table in Section 1 of the questionnaire. The PCPM officer should start with the meeting with the head of the fire station (HoS) and, following a brief introduction, gather the HoS's opinion of the support received (see Section 2 of the questionnaire). Following the conversation with the HoS, the visitator should ask if another employee, preferably a firefighter using the equipment donated by PCPM, could show him/her around the station and tell him/her more about the equipment's use (section 3).

Section 1: To be filled out by the PCPM visitor before the visitator

- 1. Name of the visitator: _
- 2. Name of the fire station visited: _
- 3. Location and date:
- 4. Equipment donated by PCPM as a part of the Polish Aid project:

YEAR OF DONATION	EQUIPMENT DETAILS	QUANTITY	VALUE & REMARKS

5. Infrastructural support provided to the station:

DETAILS OF SUPPORT PROVIDED	VALUE & REMARKS
	DETAILS OF SUPPORT PROVIDED

- 6. Has there been a visitation at the station before?
- a) Yes, provide year(s):
- b) No
- 7. Have there been any complaints filed against the support provided?
- a) Yes
- b) No
- If yes, attach a copy of the complaint and describe the PCPM response.

Section 2: Interview with the Head of Fire Station

Suggested introduction:

Thank you so much for this meeting. My name is _

and I work for the Polish Center for International Aid (PCPM). I am here to gather data for evaluation research. We are visiting fire stations which have been supported from the Polish Aid projects implemented by us to learn more about whether the in-kind and infrastructural support provided has brought about any change for the better. We do it to learn more about our own work: Are we doing it right? Is what we provide actually useful? And if we make any impact, is it positive and durable? We cannot know it without talking to our beneficiaries, and that is why I am here.

Before we start I would like to tell you a couple of things about this visitation. Firstly, it is fully voluntary and I'm here, because you're station consented to my visit. We really appreciate it. Secondly, we value honest feedback. No information you will share with us will have any impact on our future cooperation. The data collected through this survey are confidential, only PCPM and its donor, the Polish Aid of the Ministry of Foreign Affairs, will have access to this information.

Would you agree that I start with interviewing you about the support provided to your station by PCPM now? It will take about 20 minutes. Thank you!

Scope of support and general satisfaction level

Let me ask a few more detailed questions about it:

1. If I see right in our registry, your station has received the following aid from PCPM as a part of the Polish Aid Funding: [read out the list prepared earlier] Is that right?

a) Yes

b) No

If the answer is No, cross out with a single line the items that have not been confirmed. In the rest of the survey use the list without the items crossed out.

2. I would like to start with a very general question about the support provided. Overall are you satisfied with it or rather dissatisfied? It's a warm-up question. Let it be open. Write down only the key points.

Could you tell me how satisfied you are about your cooperation with PCPM?

	DEFINITELY YES	YES	NO	DEFINITELY NO	HARD TO TELL
Was the aid provided to your station relevant to its needs?					
Was the aid provided to your station of satisfactory quality?					
Have you felt treated with respect by PCPM staff and representatives?					

Do you feel you had an influence on the aid provided?			
Did you feel well informed about how to contact PCPM in case you wanted to share your feedback or file a complaint?			

4. Would you like to comment on these questions?

EQUIPMENT RECEIVED

Let me then ask you about the equipment and infrastructural aid received so far. Equipment 1:

[insert the name of the equipment]

E1.1. Is this piece of equipment still at the station?

- a) Yes
- b) No

If no: E1.1.a. What has happened to the equipment?

E1.2. Have PCPM been notified about the fact it is no longer here?

- a) yes, provide approximate date: _
- b) no
- E1.3. When the equipment was delivered, what condition was it in?
- a) Fully functional
- b) Partly functional
- c) Grounded/Non-functional

E1.4. If partly functional or grounded, please provide details. What was wrong with the equipment and had there been attempts made to improve its condition:

Questions for stations where the equipment is still present:

E1.5. How would you assess the condition of the equipment today?

- a) Fully functional
- b) Partly functional
- c) Grounded/Non-functional

E1.6. If partly functional or grounded, please provide details. What is wrong with the equipment and have there been attempts made to improve its condition:

E1.7. Do you find your station was able to maintain the equipment properly? This may include regular technical checks and repairs, ensuring spare parts, etc.

- a) Yes, fully
- b) Yes, partly
- c) No

E1.8. If "Yes, partly" or "No", please provide details on the maintenance challenges (is the problem the cost, expertise, availability of parts, etc.)

E1.9. What have been the main operation and maintenance requirements? This may include, for example, fuel, repairs, spare parts (+competencies).

E1.10 What has the operation and maintenance cost been?

E1.11.How have the operation and maintenance costs been covered? Please provide the source:

E1.12. Overall do you find that the equipment has been useful?

- a) Definitely yes
- b) Yes
- c) No
- d) Definitely no

E1.13. What were the main uses of the equipment so far? Can you recall when it was last used? Please specify types of emergencies or other operations in which the equipment comes in handy.

E1.14. Has the equipment been covered by any insurance?

- a) No
- b) Yes
- E1.15. If yes, provide details:

Copy and paste the section as many times as many pieces of equipment are to be controlled

INFRASTRUCTURAL IMPROVEMENTS

I1.1.Infrastructural improvement 1:

[insert the description of infrastructural improvement realized with PCPM support] 11.2. According to my information, as a part of PCPM support your firefighting unit received infrastructural support consisting of [explain, based on 1.1.]. Can you confirm it?

- a) Yes
- b) No

If the answer is No, close the section.

11.4. Could you describe the condition of your unit's facilities before and after the implementation of the infrastructural improvements?

11.3. In your opinion what have been the main impacts of the improvement on your firefighting unit? Feel free to name positive and negative impacts. The aid provided may have, for instance, allowed your unit to operate more effectively, or increased the costs. It may have had no impact at all.

11.4. Let us ask about the standard of implementation of these works. How far do you agree with the below descriptions?

	DEFINITELY YES	YES	NO	DEFINITELY NO	HARD TO TELL
High standard of materials and works execution					
Affordable maintenance cost					
High utility of the improvements for the daily functioning of the firefighting unit					
Durable effect					
Positive impact on how the unit is perceived by the local community					

Copy and paste the section as many times as many infrastructural improvements are to be controlled

Section 2: Interview with frontline firefighter

Having obtained the consent of the HoS, you can proceed with the meeting with a frontline firefighter (FF) assigned to you by the HoS. Explain to the FF who you are and why you are at the fire station. Inform them that their participation in the research is voluntary and fully anonymous. Make sure that they consent to the research. Depending on whether the support received by the beneficiary was equipment or infrastructural improvement, go to sections "Equipment" or "Infrastructural improvement".

Equipment

Please ask the FF to show you around the station and tell you more about how often the firefighters are called for help and what the typical actions they take part in are. Ask the FF to show you the equipment donated by PCPM. Ask:

- if the equipment has been useful,
- if applicable, what piece of it has been most useful
- if the FF could provide you with any examples (when the equipment was last used, when it came in handy, is it always taken in action, etc.)
- if the equipment is currently complete and functional
- if the equipment requires much maintenance and how it is maintained
- take pictures

Repeat these questions for other pieces of equipment if applicable.

Keep it a casual conversation and fill in the below notes template preferably after the meeting. If the information provided by the FF is too abundant to remember, ask if he or she doesn't mind that you take notes.

Template for notes:

PIECE OF EQUIPMENT 1	
Assessment of utility with examples	
Completeness and condition	
Maintenance requirements and practices	
Insert picture	

Copy and paste the template as many times as many pieces of equipment are to be controlled

Infrastructural improvements

Please ask the FF to show you around the place where the infrastructural improve-

ments were implemented and tell you more about what use is made of this space/facility. Make sure to ask:

INFRASTRUCTURAL IMPROVEMENT	
Assessment of utility with examples	
Condition of the place	
Maintenance requirements and practices	
Attitudes of the local community towards firefighters	
Firefighters' self-esteem	
Insert picture	

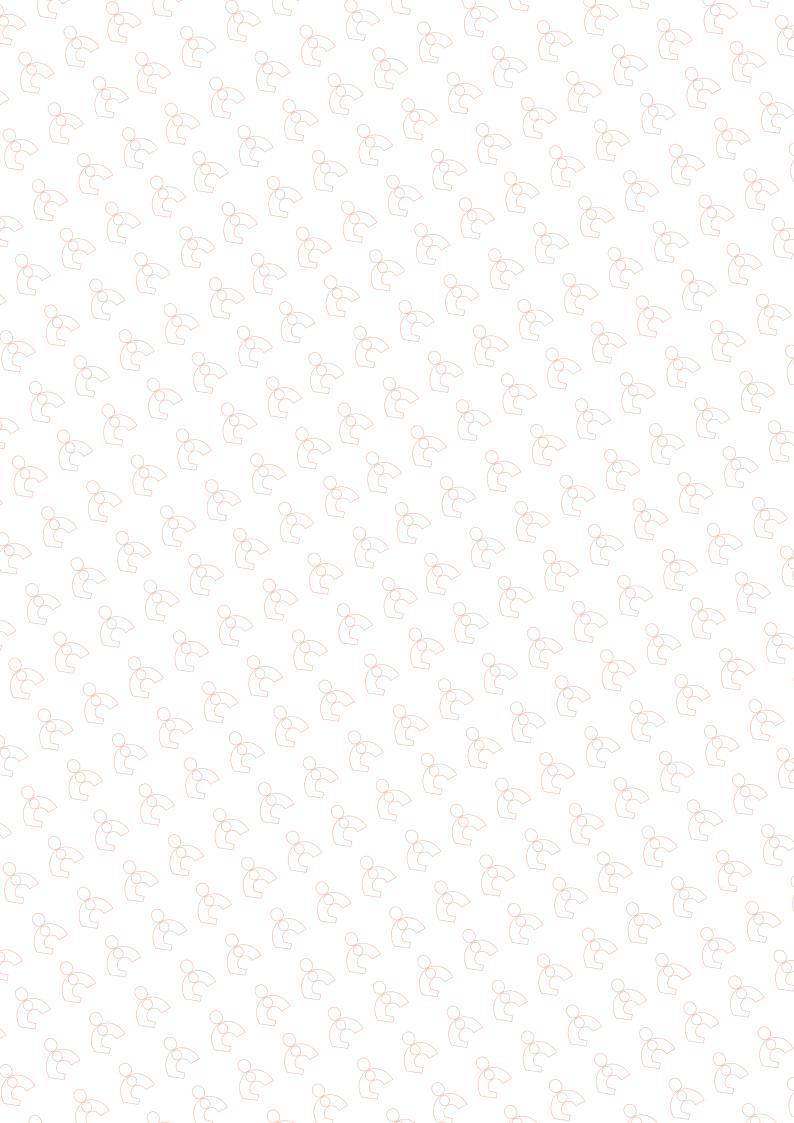
Copy and paste the section as many times as many infrastructural improvements are to be controlled

This report is a result of a group effort. Contact us if you have questions.

Field research tools, data collection supervision, data analysis and research report: PCPM MEAL team led by Dominika Michalak, dmichalak@pcpm.org.pl

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