ミャンマー国安全・高品質・衛生的な医療用酸素ガスの 供給システム構築に係る案件化調査

企業・サイト概要

■ 提案企業:北島酸素株式会社

■ 提案企業所在地:徳島県徳島市

■ サイト・C/P機関:ミャンマー国ヤンゴン市・保健省



北島ROCシステムで利用する規格化された 医療用高圧ガス

ミャンマー国の開発課題

- 医療用高圧ガス容器の安全・衛生管理体制が未整備
- 高品質な医療用酸素の供給体制が不足
- 医療用高圧ガス容器の安全な配送体制の未整備

中小企業の技術・製品

• 北島ROCシステム(アカウンタビリティ機能の下、酸素品質管理、容器品質管理、安全配送、安定供給4つの機能を制御)にて24時間365日体制で高品質な医療ガスを安定的に供給

調査を通じて提案されているODA事業及び期待される効果

- 酸素製造プラント建設、主要な病院の中央配管整備、在宅医療対応能力向上のため医療ガスボンベを含む医療 機材供与(無償資金協力)
- 安全・高品質・衛生的な酸素ガスを安定的に供給することが出来るようになり、酸素ガスに起因する同国の医療事故の減少(酸素濃度68~86%⇒95%以上)
- 保健省や医療従事者の酸素ガスにおける安全・品質・衛生に関する意識の向上(⇒規制・法律が整備される)

日本の中小企業のビジネス展開



- ヤンゴンやマンダレーなどの主要都市部の公立・私立病院、医療用ガス販売所及び寄付場への医療用酸素ガスの販売供給及び管理体制を整備し、高品質医療ガス市場のシェア拡大
- 郊外等遠隔地への在宅用医療酸素ガスの販売供給及び管理体制を整備し、高品質医療用ガスブランドの確立
- 高品質医療ガス取扱い資格(民間資格制度)を立上げ、ローカル企業など協賛代理店の増強、

Feasibility Survey with the Private Sector for Utilizing Japanese Technologies in ODA Projects, on establishing a supply-chain management system for safe, high quality and hygienic medical oxygen in Myanmar

SMEs and Counterpart Organization

- Name of SME: Kitajima Sanso Co., Ltd.
- Location of SME: Tokushima, Japan
- Survey Site Counterpart Organization: Yangon, Myanmar Ministry of Health



High pressure medical gas utilized in Kitajima-ROC system

Development subject in Myanmar

- ➤ High pressure medical gas and medical gas equipment is not controlled by specific management systems, regulatory compliance or rules and laws.
- There is not enough plants and infrastructure to ensure a stable supply of high quality medical oxygen.
- There is not an adequate distribution system to deliver high pressure medical gas safely.
- Medical staff are not sufficiently educated in the safe and effective use of medical gas and medical gas equipment.

Products and Technologies of SME

- Kitajima-ROC (Responsible Oxygen Cycle) system and it is based on the principle of accountability in facilitating and managing (1) the quality of gas equipment, (2) the quality of oxygen and (3) safety in the transport, installation and use of high-pressure gas.
- ➤ The Kitajima-ROC system runs 24 hours per day, 365 days a year supplying high quality medical oxygen gas to users safely.

Proposed ODA Projects and its Expected Impact

- A grant aid project could be put in place for construction of a plant generating high quality oxygen gas and/or bottling it in high pressure cylinders.
- Installation of central piping systems for medical oxygen in major hospitals and the provision of equipment, including the high pressure
 medical gas cylinders, to develop and enhance the capacity of medical health-care services to major hospitals in urban, rural and remote
 areas is another possible grant-aid project.
- Safe, high quality and hygienic oxygen gas could be supplied to the market to promise a reduction in medical accidents and increase the level of medical treatment by increasing the quality of oxygen from the current oxygen content of between 68 to 86% to 95% or more.
- Developing policies and regulations of hygiene, safety and quality for medical gas could be put in place by working together with the Ministry of Health and health care workers (→ regulatory revision and laws shall be developed)