

Infectious disease control PHOTOCATALYST COATING Inviroshield® M5



Fight COVD-19 in Africa and Asia · · ·

Introduction



➤ MARUSYOSANGYO Co. Ltd. executed the demonstration in three countries-Mongolia, India and Kenya.







Demonstration Overview



➤Our technology:

Photocatalyst coating for prevention infectious diseases

➤ Product Name: INVIROSHIELD M5

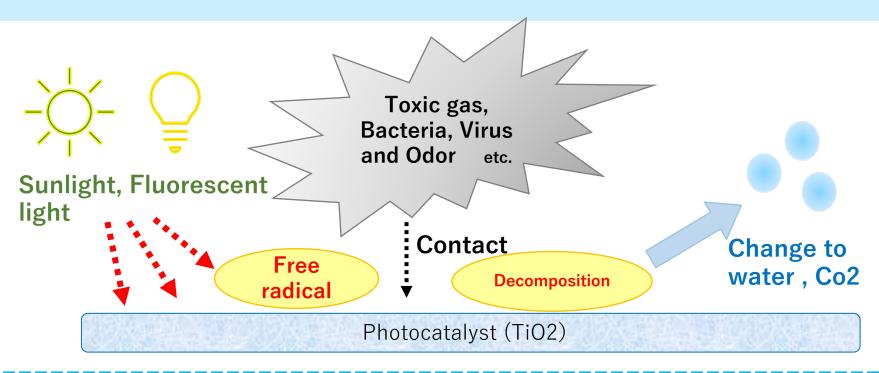






Photocatalyst coating





→ High Decomposition Power

Photocatalyst decompose various bacteria, virus, toxic gas and odor by only indoor lightening.

► Long-term efficacy

Antivirus and antibacterial efficacy lasts for a long term, at least a few years, without any other treatment or maintenance.

Purpose of demonstration



- ➤ Provide clean and safety environment to all target hospitals and reduce hygienic environment gap.
- >Save cost and time for disinfectant treatment.
- > Reduction of chemical disinfectants.

MOGOLIA: State Second General Hospital





KENYA: Nyathuna Hospital



Activity – Training from Japan



- ➤ Total 29 trainees in three countries.
- ➤ About 40% females participated in our training.

[Challenge] Provided our technology by remotely training.













Online meeting system



Manual video translated in Mongolian, Hindi and English



Application manual

Activity – Training & Practice in three countries



Based on provided training from Japan, all trainees had training session and practice of coating application by themselves in each country. This practice was so much helpful for actual coating application work.











Activity – Coating application in Hospitals



We had coating application in 8 hospitals.

Kenya: 2 hospitals / Mongolia: 3 hospitals / India: 3 hospitals (Challenge)

It was hard to scheduled the date of coating application with hospitals under the full of Covid patient. We forced to reschedule many times.







Activity - Bacterial Test Result



We confirmed that the bacterial decreased as compared with before and after coating.



Before Af
Laboratory, wall
The decrease ratio 99.5%



Before After
Laboratory, workspace
The decrease ratio 99.0%



4 type bacterial test (E.coli, Staphylococcus aureus, MRSA, Pneumococcus)

Activity – Hygiene management training



We also organized hygiene management training to medical workers by our counter partners. About 270 workers participated in total.



Kenya Healthcare Federation [KENYA]

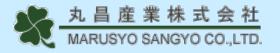


State Second General Hospital [MONGOLIA]



Rajiv Gandhi Government Hospital [INDIA]

Impact to the beneficially ①



- ➤ Reduction with regards to time and labor cost required for medical workers for disinfection work. (About 10~20% saved)
- > Reduction of chemical disinfectant liquid.





- ✓ Saved cost and time are used for treating better care for patients.
- ✓ Restrain resistant bacterial

Before Cleaning Area	After Cleaning Area	NOTE
Sink	Sink	**As the hospital rule, these area must be cleaned every time operation.
Bed	Bed	
Medical instrument	Medical Instrument	
Door	Exception	*After the project, the hospitals conduct bacterial test regularly to maintain the hygienic level.
Wall	Exception	
Ceiling	Exception	



> Reduction of bacteria and virus level.







- **✓** Prevention for infectious diseases.
- ✓ Measure for Healthcare- Acquired Infections.(HAIs)
- **✓ Provide safety and clean environment for all hospitals.**



Introduced our technology to local people and health care field via some media resources.





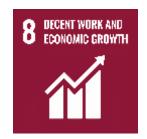
【INDIA, Presentation】
With the member of government doctors.



[MONGOLIA, TV broadcast] Local tv program.

Future opportunity





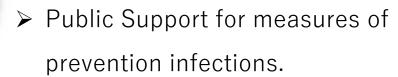






ISSUE
Limited budged for hygiene control





- Cooperation with Health authorities, UNIDO etc.
- > Provide INVIROSHIELD M5.

For each country



- > New Industry
- Business & Job Creation
- > Hygiene environment





