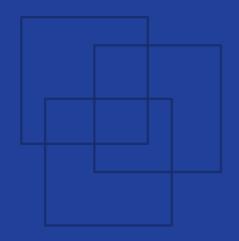


## Storing & recordkeeping

Sample room operations





Copyright © International Labour Organization 2019

First published 2019

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

ISBN: 9789220326152 (web pdf)

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns

Photos: © ILO Printed in Thailand

## **Table of Contents**

| About the FIT module                                | 4  |
|---|----|
| Guidelines for successfully using the training tool | 5  |
| Session 1   |    |
| Business case study                                 | 9  |
| Session 2   |    |
| Learning about the topic                            | 15 |
| Session 3   |    |
| Action items  | 27 |

### **Factory Improvement Toolset**

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT has been developed to be a sustainable, time- and cost-efficient option for supporting factories to enhance productivity through improved business practices and working conditions. FIT focuses on areas of production improvement and actions to be taken specific to each participating factory. It can be utilized as stand-alone learning tools or to complement other training programmes.

With each module lasting no more than 2.5 hours, FIT enables factories to train personnel, whilst minimizing interference with production realities. The easy-to-use methodology makes it possible to rapidly scale the implementation to reach a large cohort of trainees across multiple production facilities.

Working in small groups, participants review real-life situations and engage in discussions to determine improvements to be made in factory without an external trainer or specialist. This self-facilitated, activity-based and highly participatory learning approach positions participants as both student and teacher and makes the toolset self-tailored to the needs and interests of each group.

#### About this module

The FIT module on Storing & record-keeping is a training for garment manufacturers to improve sample room operations. Participants will work on storing samples and pattern boards, and recording sample room activities. This module takes about 2 hours to complete.

#### Upon completion of the training, participants should have:

- Learnt how to store samples and pattern boards appropriately and in a systematic way.
- Learnt how to record sample room operations using sample request forms and a sample room register.

The Factory Improvement Toolset of the International Labour Organization (ILO) are developed and provided by the ILO's Enterprises Department.

Authors: Alix Machiels, Sara Andersson, Charles Bodwell, Jayantha R. de Silva.

This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License.



# Guidelines for successfully using the training tool

#### Read out-loud

The FIT tool is designed for participants to take turns reading the instructions in the modules out loud to the group. At least one member of the group should be selected in the beginning of the session to take this responsibility.

#### Work as a group

Always work in groups of 5-7 during a FIT session. The programme will not be successful if participants work independently or do not collaborate with each other.

#### Be active

Encourage everyone in the group to actively contribute to the discussion. Ensure that no group member dominates the discussion or does not participate at all.

#### Monitor the time

Select one member of the group to monitor the time for each activity and remind the group when it is time to move to the next exercise.

#### Complete the action plan

Complete the action plan at the end of the session. This will help ensure that FIT results in improvements in the factory. Review the plan a while after the session to make sure that actions in the plan has been completed accordingly.

#### **Icons**

A set of icons is used throughout the modules to provide easy to recognize reference points for different tasks within each session and activity.



#### **Read out loud**

One member of the group should read out loud to the rest of group.



#### **Knowledge link**

Knowledge and skills are linked to other FIT learning resources and support.



#### Time allotted

Indicates how much time each sessions and activity should take.



#### Supplies needed

Indicates that supplies may be necessary to complete the session.



#### **Begin step-by-step instructions**

Indicates that the step-by-step instructions for an activity are beginning.



#### Think about it

Indicates additional information for the participants to think about.



## Measuring your performance

Measuring operational efficiency is a key aspect of running a productive factory. The box(es) below guides you in understanding which measurement indicator(s) can be used to measure and evaluate the performance of your factory in relation to the topics covered in the FIT series on sample room operations.

| Indicator 1 | Average sample turnaround time (Hours)   |  |  |  |
|-------------|--|--|--|--|
| Definition  | The average number of hours that it takes for you to produce a new sample (for a new style). It can also be calculated in hours.           |  |  |  |
| Purpose     | To understand how efficient your sampling and pattern-making operations are, and begin to identify how you could improve efficiency.       |  |  |  |
| Calculation | Simply record the number of hours it takes to make each new sample (for a new style), then calculate the average at the end of each month. |  |  |  |
| Frequency   | Calculate monthly.   |  |  |  |
| Responsible | Sample room manager / Master sample maker  |  |  |  |

| Indicator 2 | Sample hit rate (%)  |
|-------------|--|
| Definition  | The proportion of samples that you get right the first time (that are accepted by the buyer the first time) over a period of time – not including style changes by buyers. |
| Purpose     | To understand the quality of your counter samples and pattern-making processes, and begin to identify how you could improve quality. The closer to 100% the better.        |
| Calculation | (# samples right the first time / total # samples made) x 100%   |
| Frequency   | Calculate monthly.   |
| Responsible | Sample room manager / Master sample maker  |







## **Business case study**

#### Goals

Preparing you for the type of discussions you will have with other group members throughout the learning module and understanding the benefits of being exposed to different perspectives.

Understanding better why storing and record-keeping systems are important in the factory.

#### **Overview**



One member should read the full session out loud to the rest of group A business case study presents a real-life situation for learners to reflect on and discuss with other group members. By discussing the case, students learn from others' ideas and perspectives, and develop an understanding of the topic at hand within the workplace.



15 minutes



Learning manual, pens, markers and poster paper



One group member reads the case study out loud



The whole group discusses the case study



Everyone develops a deeper understanding of the topic



#### **Activities**

Activity

1



#### Case study

The case study below presents a situation that could happen in real life.

## **2**. Instructions:

1) As a group, listen to one member read the case study below while following along in your learning module.

Elda is a new sample room manager at the HS garment factory. She realizes that there is no proper storage system for samples and patterns. As a result, unfinished work often gets mixed with approved work. Patterns get lost, end up missing a component, or mixing different sizes. This causes the factory to lose time. Buyers feel that things are too slow. There is no record-keeping system, so Elda cannot inform Merchandising on the progress, and assess whether samples are delivered on time and with quality.

Elda decides to make changes. She clears up two areas in the room to store samples and patterns. In each area, samples and patterns are clearly tagged and stored by buyer and style number. Approved samples and boards are stored in a separate section, labeled in green to avoid confusion. Then, with Merchandising, she drafts a sample request form that can be used to send sample orders. Lastly, she creates a register form, in which she tracks progress for each sample request placed by Merchandising.

Thanks to these changes, the sample room is more orderly, and workers can easily store and find the samples or patterns needed. Confusion on what has been approved or not is avoided. Elda can coordinate with Merchandising better, and identify what should be improved to make better samples faster.

2) Together, discuss Elda's situation by answering the three questions in table 1 on the next page.



#### **Table 1. Questions about Elda's situation**

| 1. | What problems has Elda identified? What impact do these problems have on the |
|----|--|
|    | factory and its workers?   |

- 2. What does Elda do or change in order to solve these problems?
- 3. What are the results of Elda's solutions for the factory and its workers?



This page has been intentionally left blank and can be used for note taking.







# Learning about the topic

#### Goals

Discussing the different types of boards, how they should be used, and by whom.

Discussing good sample storage practices, and how to appropriately tag samples.

Learning how to best store pattern boards in your sample room.

Learning how to record operations using sample request forms and a sample room register and understanding why it is important to do so.

#### **Overview**



One member should read the full session out loud to the rest of group





Learning manual, pens, and markers This training module aims to help you improve the way your sample room operates by focusing on storage and record-keeping systems. A good storage system is necessary to avoid samples and patterns getting lost or damaged, and also to avoid sampling or production mistakes. Record-keeping is important to help you keep track of operations, but also to identify problems, find solutions, and improve your sample room's productivity and sampling quality. Throughout this module, you will work on the three topics below.

Storing samples

Storing **boards** 

Keeping records

First, you will start by reviewing the different types of boards and their use, then continue to work on the steps above by learning more about how to store samples and master boards. Finally, you will learn how to use sample request forms and a sample room register for keeping records in the sample room.



To learn more about samples and patterns, ask your facilitator for the "Sampling & pattern-making" module!



#### **Activities**

**Activity** 

**2**a



#### Pattern boards

Once a buyer has approved the counter sample, final **pattern boards** can be prepared, inspected, approved by the sample room manager, then stored and issued to the relevant departments. In this activity, you will discuss making and approving pattern boards in your factory.



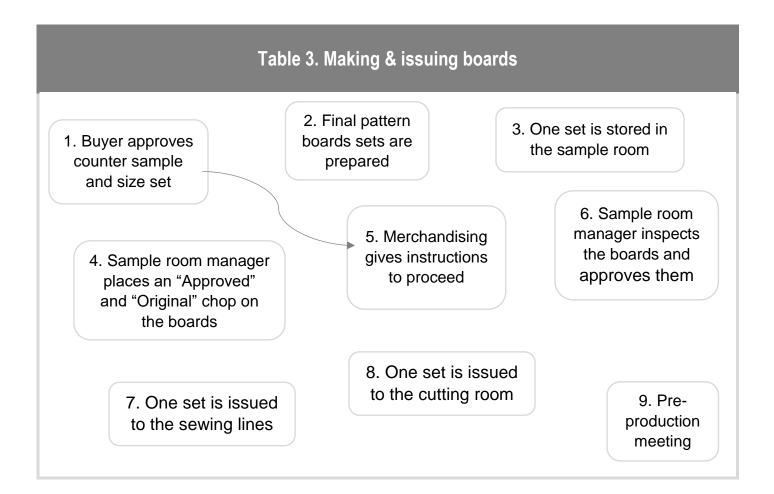
- 1) Together, discuss:
  - How are pattern boards made in your factory? By whom, and using which materials / tools?
  - How many pattern boards do you make for each style? Who uses them, and for what?
- 2) Together, look at the 3 types of board sets in table 2, then match each one with the right production department and how they will be used by drawing a line. Solutions are at the bottom of the page.
- 3) Together, look at the steps of making and issuing boards in table 3, and put them in what you think is the right order using arrows. Solutions are provided at the bottom of the page.
- 4) Together, discuss:
  - Does your process involve the same steps as table 3? Do you think it should? Why or why not?
  - Does the sample room manager inspect and approve board sets? If so, how?



It is important for the sample room manager to mark his/her approval on the final boards (using chops and a signature) to make sure that they do not get confused with other incorrect or unfinished boards.



| Table 2. Three types of boards |                 |  |  |  |  |  |  |
|--------------------------------|-----------------|--|--|--|--|--|--|
| Which set?                     | →Issued to who? | For what use?                          |  |  |  |  |  |
| Pattern boards                 | Sewing lines    | To store in the sample room            |  |  |  |  |  |
| 2. Master boards               | Cutting room    | To guide marking for sewing operations |  |  |  |  |  |
| 3. Finishing / Marking boards  | Sample room     | For manual / CAD marker making         |  |  |  |  |  |



Solutions for 3):  $1 \rightarrow 6 \rightarrow 2 \rightarrow 6 \rightarrow 7$  (6 not snoithlos

marking for sewing operations.

Solutions for 2): Pattern boards are issued to the cutting room for manual or CAD marker making; Master boards are kept in the sample room and stored there; Finishing / marking boards are issued to the sewing lines to guide



2b

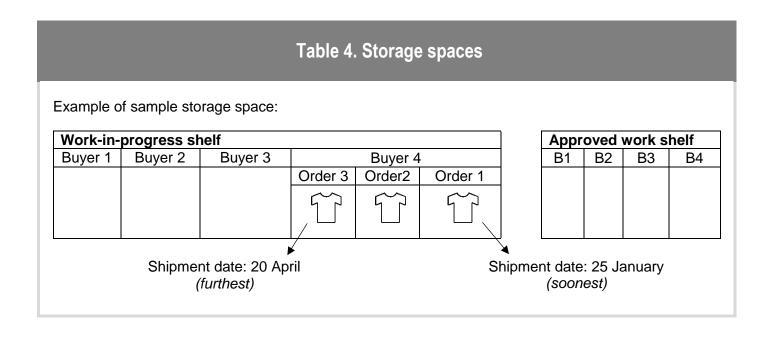


#### **Storing samples**

There should be a reserved space in your sample room for **storing samples**, whether or not they are finalized. This helps avoid them getting damaged, lost or misplaced – which causes delays and mistakes. In this activity, you will learn more about storing samples.



- 1) Together, discuss:
  - Do you store samples in your sample room? If so, which samples? Where and how do you store them?
  - Do you think it is important to keep samples in storage? Why or why not?
- 2) Together, look at the storage space example in table 4. Then, look at the list of 10 good practices for storing samples in table 5, and put a ✓ in the column on the right if you do these things in your factory.
- 3) Together, look at the 4 pictures of sample rooms in table 6, then discuss what is good or bad storage in each picture.
- 4) Samples should be tagged to help identify them. In table 7, draw what your sample tag looks like or could look like (including the information on it). Then, discuss: Should anything be added to the tag to help you identify and differentiate samples better?





| Table 5. Storing samples   |   |
|--|---|
| Good practices   | ✓ |
| 1. Have a specific area reserved for storing samples in your sample room.  |   |
| <ol><li>Divide this storage area into work-in-progress (not approved yet), and<br/>approved (to be issued) sections. Clearly label each section.</li></ol> |   |
| <ol> <li>Within each storage area, store samples into different sections for different<br/>buyers. Clearly label each storing section.</li> </ol>          |   |
| Within each buyer section, store samples by grouping those corresponding to the same style.  |   |
| <ol><li>Within each buyer section, store the approved samples by order shipment<br/>date (from the closest to the furthest date).</li></ol>                |   |
| 6. Hang samples on clothes hangers. Make sure the hangers are not damaged and the right size, to avoid damage and distortion of the fabric.                |   |
| 7. Clearly label each sample by indicating the buyer's name, style#, shade#, size and whether it has been approved or not.                                 |   |
|  |   |

8. Many buyers attach tags or seals (usually red) to the approved samples. Never remove them, as it will help you identify approved samples and

9. If your buyers do not use the tag/seal system, set up a system to identify

When an order has been completed, move the sample to another

storing section labelled "past orders". Do not throw these samples away, in case the buyer places a new order, or another order for a similar style.

approved samples yourself (for example using colour tags).

proves the buyer's approval.

10.

#### **Table 6. Picture practice**









Table 7. Sample tags

Draw what your sample tag looks like below (or what it should look like).

Activity 2c



#### **Storing boards**

Besides the sample storage area, there should also be an area for **storing board** sets in your sample room. Again, proper storage is necessary to avoid sampling or production mistakes. In this activity, you will learn more about storing boards.

## **2** Instructions:

- 1) Together, discuss: Do you have a system for storing pattern and master boards in your sample room? Share and explain.
- 2) Have a participant read aloud the 6 tips for storing boards in table 8. Then, look at the pictures on the next page to understand better.
- 3) Together, read through table 9, and for each pair (line), tick the option which you think is right (or the best one). The solutions are provided at the bottom of the page.
- **4)** Together, discuss: Besides samples and boards, what else needs to be stored in a sample room? Do you have a storage system in place for these items in your factory? If so, share and explain.

#### Table 8. Six tips for storing boards

- 1. Set a specific area for storing boards. Divide it into a "work-in-progress" area (pattern boards that are not finalized yet) and an "approved" area (final boards).
- 2. Divide the "approved" area into three sections: one for master boards, one for pattern boards (cutting room), and one for finishing boards (sewing lines).
- 3. Make a hole through all the boards in the set, then tie and hang them together on a rail / rack using a hook or a hanger.
- 4. Hang the boards using cotton thread (excess thread, for example), rather than rope or plastic thread that might cause the boards to slip or get damaged.
- 5. Hang the specification sheet together with the boards to help you identify each set. Or, add a solid tag to each set, mentioning buyer's name, style#, and size. Use different colour tags to differentiate approved boards from work-in-progress.
- 6. When an order has been completed, move the sets to another section labelled "past orders". Do not throw them away, in case the buyer places a repeat order.



#### Good examples:





|     | Table 9. Storing boards  |   |  |  |  |  |  |  |  |
|-----|--|---|--|--|--|--|--|--|--|
| 1.  | ☐ Store boards with samples  | ✓ Store boards in a separate area                                       |  |  |  |  |  |  |  |
| 2.  | Separate boards to be stored and boards to be issued                         | Store boards to be issued together with work-in-progress                |  |  |  |  |  |  |  |
| 3.  | Store approved boards with those that have not been approved yet             | Store work-in-progress and approved boards separately                   |  |  |  |  |  |  |  |
| 4.  | ☐ Pile up the boards on shelves  | ☐ Hang the boards on rails or racks                                     |  |  |  |  |  |  |  |
| 5.  | ☐ Hang the boards using cotton thread  | ☐ Hang the boards using tape  |  |  |  |  |  |  |  |
| 6.  | Store all cut components for one garment together as one set                 | Store each component for each garment separately                        |  |  |  |  |  |  |  |
| 7.  | Attach the corresponding specification sheet together with the set of boards | Attach the corresponding purchase order together with the set of boards |  |  |  |  |  |  |  |
| 8.  | Write all the necessary information directly on the boards                   | Write all the necessary information on tags                             |  |  |  |  |  |  |  |
| 9.  | ☐ Always specify the style#  | ☐ Always specify the fabric type  |  |  |  |  |  |  |  |
| 10. | Throw the boards away as soon as the order is completed                      | Keep the boards in a separate area after the order is completed         |  |  |  |  |  |  |  |

Solutions: 1. In a separate area, 2. Separate, 3. Store separately, 4. Hang, 5. Using cotton thread, 6. Store together, 7. Specification sheet, 8. On tags, 9. Style#, 10.Keep.



**Activity 2**d



#### **Keeping records**

Several patterns and samples are needed just to get one garment style right. It can be hard to keep track of your progress and operations. Therefore, it is very important to have a good **record-keeping** system. In this activity, you will learn more about how to keep records in your sample room using a sample room register.



- 1) Together, discuss the following questions: Do you keep records in your sample room? If so, what do you record, and how?
- 2) Together, have a look at the sample request form in table 10 and the sample room register in table 11 (line 1), and make sure everyone understands how they were filled in.
- 3) Together, use the information from the sample request form below to fill in the shaded cells of the sample register in table 11. Solutions are at the bottom of the page.
- 4) Have a participant read aloud the text box below table 11. Then, together, discuss: Based on this register, do you think this sample room may have productivity or/and quality issues? Why or why not?

| Table 10. Sample request form    |                              |                      |                  |                   |                          |                   |               |  |
|----------------------------------|------------------------------|----------------------|------------------|-------------------|--------------------------|-------------------|---------------|--|
| Date: 01 Ap                      | ril 2019                     | Requested by:        | Merchandis       | ing               | Buyer: J&A Manufacturing |                   |               |  |
| Style #                          | Description                  | Sample type          | e Size(s)        | Quantity required | Required by              | Quantity received | Date received |  |
| 26756                            | Black short-<br>sleeve shirt |                      | Middle           | 1                 | 30Apr                    | 1                 | 05May         |  |
| 58947                            | Women's deni<br>pants        | Size set             | S, M, L          | 3                 | 05May                    | 3                 | 12May         |  |
| 29586                            | Men's basic t<br>shirt       | - Pre-<br>production | Middle           | 2                 | 30Apr                    | 2                 | 30Apr         |  |
| 49726 Long skirt                 |                              | Counter sample       | Middle           | 1                 | 25Apr                    | 1                 | 24Apr         |  |
| Merchandising manager: signature |                              |                      | Sample signature | room mana         | iger:                    |                   |               |  |

The numbers and examples in these two forms are only provided to help you practice, and may not accurately reflect the reality!

#### Table 11. Sample room register

| Date  | Buyer | Style # | Tech<br>pack<br>received | Sample fabric(s) received | Sample<br>trims<br>received | Sample type & size             | Require<br>d by<br>(date): | Sample<br>making<br>start (date) | Delivered on (date): | Sample<br>turnaround<br>time (hrs) |
|-------|-------|---------|--------------------------|---------------------------|-----------------------------|--------------------------------|----------------------------|----------------------------------|----------------------|------------------------------------|
| 01Apr | J&A   | 26756   | 01March                  | 20March                   | 25March                     | Counter sample,<br>Middle size | 30Apr                      | 03May                            | 05May                | 16 hrs                             |
|       |       |         | 15Feb                    | 30Feb                     | 30Feb                       |                                |                            | 02May                            |                      | 80 hrs                             |
|       |       |         | 01Jan                    | 15Jan                     | 18Jan                       |                                |                            | 26Apr                            |                      | 32 hrs                             |
|       |       |         | 15Jan                    | 30Jan                     | 05March                     |                                |                            | 22 Apr                           |                      | 16 hrs                             |
|       |       |         |                          |                           |                             |                                |                            |                                  |                      |                                    |
|       |       |         |                          |                           |                             |                                |                            |                                  |                      |                                    |



A **sample room register** helps you keep track of the progress of sampling orders place by Merchandising. Sample room registers also help you judge your **productivity and quality** by evaluating the amount of time each sample takes. This helps you evaluate problem areas and find solutions for them, but also plan operations better and produce faster. To maintain your register, you can also use cheap computer applications like Microsoft Excel rather than paper, to be able to better share progress with other departments.

49726, Counter sample, Middle size, 25Apr, 24Apr

Solutions: Line 2  $\rightarrow$  01Apr, J&A, 58947, Size set, S-M-L, 05May, 12May; Line 3  $\rightarrow$  01Apr, J&A, 29586, Pre-production, Middle size, 30Apr, 30 Apr; Line 4  $\rightarrow$  01Apr, J&A,



## **Action items**

#### Goals

Summarizing and revising the new knowledge gained.

Identifying concrete applications of the new knowledge that benefit your factory.

#### **Overview**



One member should read the full session out loud to the rest of group





Learning manual, pens, and markers Throughout this module, you gained new knowledge on how to store samples and pattern boards, and keep records in the sample room.

#### Storing samples

Storing **boards** 

Keeping records

In this session, you will think of ways to apply your new knowledge to improve storing and record-keeping in your sample room by reviewing best practices and drafting your own action plan.



Sample request form and sample room register templates are available online for you to print out and use in your own factory. To obtain it, contact your factory's FIT coordinator!



## **Activities**

**Activity** 

**3**a



#### **Best practices checklist**

In this activity, you will review best storing and record-keeping practices as a next step for evaluating your own and implementing improvements.



1) Together, look at the list of best practices in table 12, and put a ✓ in the column on the right if you use these practices in your factory.

| Table 12. Storing & record-keeping  |   |  |  |  |  |
|---|---|--|--|--|--|
| Best practices  | ✓ |  |  |  |  |
| There are specific systems and designated areas for storing samples and pattern boards, clearly divided, indicated and labelled.                    |   |  |  |  |  |
| Sample room workers understand the sample and pattern board storage systems and respect and maintain it.  |   |  |  |  |  |
| Inspections are carried out regularly to ensure that the storage system is respected.   |   |  |  |  |  |
| Merchandising uses a sample request form to order a new sample from the sample room and track order progress.                                       |   |  |  |  |  |
| 5. The sample manager records operations and their progress in a sample room register. It is also used to identify quality and productivity issues. |   |  |  |  |  |



Activity 3b



#### Your action plan

In this activity, you will think of ways to apply your new knowledge to improve your storing and record-keeping in the sample room by drafting your own action plan.



1) Together, fill in the action plan (table 13) on the next page. Identify a key problem that you want to solve and write down the solutions you identified while working on this module.



#### Table 13. Storing & record-keeping – Action Plan

#### **Problem identified**

| Solutions identified | Action(s) to be taken | Person responsible | By when? | How will improvements be measured? |
|----------------------|-----------------------|--------------------|----------|------------------------------------|
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |
|                      |                       |                    |          |                                    |

#### Storing & record-keeping

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT is being piloted in Asia under the regional Decent Work in the Garment Sector Supply Chains in Asia project funded by the Government of Sweden.

**Decent Work Technical Support Team for East and South-East Asia and the Pacific** 

United Nations Building, 10th Floor Rajdamnern Nok Avenue, Bangkok 10200, Thailand

Tel.: 662 288 1234 Fax. 662 288 3058

Email: BANGKOK@ilo.org



ISBN: 9789220326152 (web pdf)