

Importance of ancillary areas

There are many service areas behind the scene, or what may be termed as “back of the house,” which are required to be well organized, efficiently run and supervised and stocked with appropriate equipment’s depending on the style of operation. It is necessary for all these factors to come together like a well-oiled machine to determine overall a successful back-up to the food and beverage operation.

The ancillary areas are usually between the kitchens and the food service areas, viz.-

- 1) Pantry or still room,
- 2) Kitchen Stewarding comprising of
 - (a) wash up and
 - (b) silver room & plate room,
- 3) Food Pick-up Area,
- 4) Linen room and
- 5) Store

They are important units in the make-up of a catering establishment, acting as the link between the kitchen or the food preparation unit and the restaurant or the food service unit. They are meeting point for the staff of various departments as they carry out their duties. Therefore there must be a close liaison between these various members of the staffs and the department under whose jurisdiction they come.

Opportunities of Kitchen stewarding

The kitchen stewarding department oversees those areas of the hotel that are not covered by the housekeeping department, mainly back of house areas such as kitchen, cafeteria, corridors, receiving and store areas and administrative offices located in the back of house..

The job of the kitchen stewarding can be split into two segments

- a) Utility Functions.

b) Maintenance of inventory of various F& B Service & Production Equipment's.

A) Utility Functions

a)

1. Keeping all working areas not covered under the housekeeping department clean and free from dirt and grease by periodic mopping the floors and work surfaces during the work cycle.
2. Keeping all production and service equipment's clean and functioning properly in coordination with the engineering & maintenance department.
3. Maintaining high standards of hygiene and sanitation by using practices and products that discourage cross contamination, food poisoning and other health hazards.
4. Ensuring proper garbage disposal by separating garbage at source, removing garbage promptly, storing garbage under ideal condition and disposing of it by correct means.
5. Providing clean and hygienic pots and pans by using corrects cleaning agents and practices and cleaning utensils at the right temperature, and ensuring that the methods and practices used are according to the regulations of the health and safety standards.
6. Providing F&B service equipment support to banquet functions.
7. Playing an active contributor to F&B cost control. This is achieved by:
 - a) Using correct quantity of detergents and cleaning agents. This not only keeps the consumption of cleaning agents low but also lowers the cost of running the ETP for purification of the discharged waste water.
 - b) Reducing breakages by proper handling of glassware and crockery.

- c) Providing properly cleaned equipment as unclean equipment's would result in rapid deterioration of cooked food thereby amounting to wastages.
 - d) By providing correct service equipment's – entrée dishes and platters. Food served in incorrect equipment's would either increase or decrease would result in improper portion control resulting either increase in food cost or loss of goodwill.
 - e) Storing equipment's in proper methods. Improper methods of storage would lead to breakages.
 - f) Checking the garbage bins so that they do not account for misplacement or pilferage which ultimately results in wastages. g) Conducting periodic checks on equipment's which are not frequently used.
 - g) Conducting surprise checks on equipment's for misuse and malfunctioning that can lead to higher maintenance cost.
 - h) Ensure periodic service of equipment's and replacement of worn out parts which is a part of preventive maintenance and reduces cost.
 - i) Checking equipment's for gas leakage and reporting to maintenance section immediately for their attention.
8. Storing flammable materials in safe places marked for such storage.
 9. Ensuring that fire extinguishers and firefighting equipment's are in right places and in working condition.
 10. Using proper equipment's and signage indicating their work in operation.

b) **Maintenance of Inventory**

The kitchen stewarding department is also responsible for storage of various service and production equipment's. They have to maintain their inventory and periodically undertake physical stock taking and tally the same with the

book stock. Any breakages and losses are brought into the notice of higher authorities - F&B Service Manager and action is taken accordingly.

The Activity of kitchen Stewarding

The kitchen stewarding department is primarily concerned with the storage, maintenance, cleanliness and issue of various flatware and hollowware. It is also responsible for cleanliness of the kitchen and washing the pots and pans. It procures, installs and services gas connections and coal supply for cooking. The department should have ideally a large store for kitchen and service equipment, dishwashers and pot washing section. Many hotels may confer the department with the responsibility of running the staff cafeteria when it would have its own brigade for cooking staff meals. The department is also responsible for pest control activity of the kitchen in conjunction of the house keeping department.

The Organization of the Department

It comprises of

Executive Kitchen Steward:

He is responsible for planning, organizing, directing and controlling the stewarding activity. He would control the kitchen stewarding stores and ensure that the kitchen and the restaurants smoothly get their needs.

Kitchen Steward:

This is a supervisory level responsible in his/her own shift. There will supervisor throughout the day's operation for it is a 24 hours activity.

Utility Workers:

These are cleaning brigades, who clean kitchens and equipment and do other heavy work.

Dishwashers:

They operate the dishwashing machine or manually wash the dishes and other silverware.

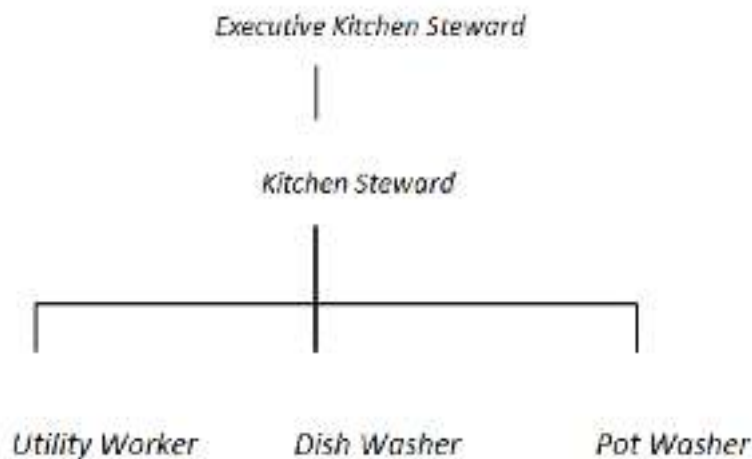
Pot Washers:

They clean large pots and cooking utensils of the kitchen using jet water sprays.

Kitchen Porter:

They comprise of a multi-task brigade who can do heavy job as and when required.

The Hierarchy



The kitchen Stewarding Area

The Kitchen Stewarding department is basically divided into two segments, i.e., a) Wash up Area.

b) Silver Room & Plate Room.

a) The Wash up Area:

The Wash up area is the most important service area and must be cited correctly so that the brigade can work speedily and efficiently when passing from the food service area to the kitchens. The layout and positioning of the area should be at strategic point so that it can be easily reachable with least leg work. The waiter would move from the food service outlet after clearance of the soiled plates, cutleries, entrée dishes and stack them in definite part of the dirty collection table and then move to the kitchen hot plate to collect the next order. The plates should be correctly sized with the table wares on a plate with the blade of knives running under the arches of the forks. All glassware is to be stacked on a separate tray and carried at a separate point to be washed separately to minimize breakage.

b) Silver Room & Plate Room.

The Silver and the Plate Room is the store room for all the clean earthenware and metal tableware. In small hotel this room is combined with the wash up. They maintain an adequate stock of all the tableware, earthenware and glassware for service together with a slight surplus stock to handle emergency situations. The room is equipped with cupboards and shelves. The inventory of all the articles is regularly taken and tallied with the book stock.

The shelves and the cupboards are so designed so as the larger silver items like flats, platters and entrée dishes are stored on the shelves while earthenware articles are stored in the cupboard. While stacking the heavier items should go at the lower shelves while the lighter items are stored higher up.

Smaller items such as ashtrays, menu card holders, table numbers, cruet set, butter dishes are best stored in drawers lined with green baize.

Dish washing

The job of dish washing comprises of removal of the adherents. The common adherents on soiled equipment's are

1. Saliva
2. Lip marks

3. Food materials – carbohydrates, fats and proteins
4. Insoluble carbon and salt residues remaining from the scorching of foods which sometimes occurs at the base of the cooking utensils.

Since sanitation is essential to catering and therefore the importance of proper cleaning methods, for kitchen, service, storage and other equipment's is essential in any catering operation.

Cleaning involves two components:

Viz -

- Water
- Cleansing agents.

Water:

The two aspects of water are

- a) Its purity
- b) Its temperature

a) The purity of water is guided by presence of pathogenic and non-pathogenic microorganism. For the water to be pure it should be free from all pathogenic micro-organism the presence of which is liable to contaminate all washed articles. However the water is considered to be safe if the presence of nonpathogenic organism count up to 22 coli forms per liter of water. The presence of such non pathogens will not account for any contamination but their presence contaminate the sewerage system which is needed a periodic treatment.

Another impurity that is present in water is the soluble calcium and magnesium salts that make the water hard that makes the detergents literally inactive.

Samples of water are collected at random and are checked for its impurities. Accordingly, water is treated and sends for its use.

b) The temperature of water is again a factor for effective washing. Water subjected to high temperature destroys the micro-organisms, makes the water soft and helps in removal of fats that adheres to the soiled articles.

The ideal temperature is:

Stage	° Centigrade
Pre rinse	50 ° C
Wash	60° C
Final Rinse	80° C.

a) Another function of water, apart from acting as a cleansing agent itself, is its performance of the job of a carrier when used in conjunction with the cleansing agents.

Cleansing Agents

One of the components that is capable of removing the grease and adherents (foreign materials) sticking to the surface of the article to be washed are termed as cleansing agents.

They come under:

- a) Detergents & soaps.
- b) Acid Cleansers
- c) Grease Solvents
- d) Abrasives.

However, the acid cleansers and the grease solvents do not play a vital part in dishwashing.

Detergents:

They are cleansing agents that convert partly soluble organic compounds and other particles into a colloidal solution. The most common of them are soaps in form of powder, granules or liquid.

The Properties of a Detergent:

A quality detergent must have the following properties:

- a. **Solubility:** This implies to how fast the detergent dissolves in water.
- b. **Foaming Action:** A quality detergent must produce enough foam. This quality speaks about the power to reduce the hardness in water.
- c. **Wetting Power:** This means the power of the detergent to spread over the surface to be cleaned.
- d. **Emulsifying Power:** By this it means the action of the detergent by which it breaks down the fats into smaller parcels.
- e. **Suspending Power:** The power by which it keeps the dirt which has been removed from the washed articles in suspension in water.

Eco-friendliness: The detergent used must be environment friendly and when discharged in the waste water must not harm the constituents of the water.

How detergent works:

The detergent works in three ways:

First, the detergent spreads over the surface consisting of grease and various adherents. By the action of the detergent the surface tension of the water is reduced, allowing the detergent to penetrate through the grease and

adherents, softening them and then finally separating them from the surface of the soiled surface.

Secondly, it breaks down the grease into smaller particles.

In **third phase** the adherents which has been removed and broken down into smaller particles are prevented by the detergent to settle on the washed article which is still in the solution by keeping the dirt hanging in water. In short this is the suspending power of the detergent which prevents the dirt thus removed to settle back on the washed article still in the solution. There are various **types of detergent** that exists in various forms–

- Powder & liquids
- Alkaline & non alkaline
- Non toxic germicidal, etc.

The choice of detergent will greatly depend upon

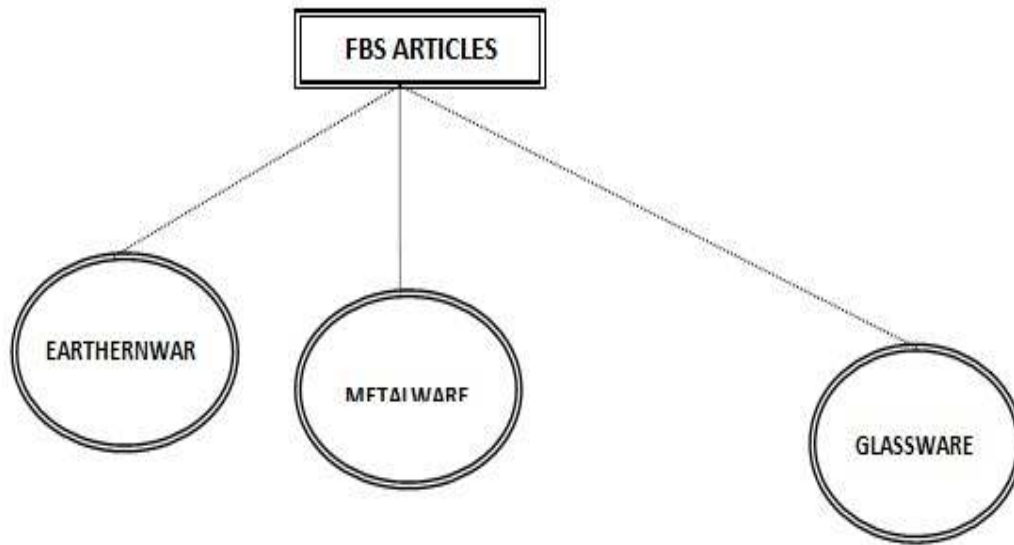
- a) **on which article it is used**
- b) e.g. – powder detergent would be functional on crockery, & cutlery, but for glassware liquid detergent is preferred.
- c) **How it is used during washing-** manual washing or mechanical washing.

E.g. for dish washing the detergent should be friendly on hands, whereas detergent used for mechanical dish washing should be protective on articles and machine as well.

Thirdly **the degree of stain** also accounts for choice of detergent.

Grade, Quality, Characteristics & examples of Detergents used on various FBS Articles

Types of F& B Articles that are washed at the wash-up



A study on detergents available for washing as recommended by Johnson Diversey



IHM NOTES

	Available Quantity (litres)	Characteristics				General Standard Concentration
			Form & use	Material used	Substrate for	
Cleansing	Liquid, 750 ml pack.	Characteristics	Handwash	Hand	Handwash	100 mg-0.14g Sterilize with
	Liquid, 200 ml size	Characteristics, this liquid contains 70% alcohol & is used for rapid drying and removing stains, a general agent to rub out dirt	Amalgam Restoration	Steel	Highly abrasive	
	Liquid 500 ml	This liquid is used for sterilizing restorations removal of stubborn stains like the yellowish stains that form on cups. In a soaking process.	Cleaning	SS	Highly abrasive	
Metalware	Powder 250g pack	Characteristics provide disinfectant solution, specially formulated for providing cleaning & sterilization in a single step for use on food contact areas and surface. It is an effective detergent against all protein such and has a broad spectrum of biocidal action.	Sterilized	DAB	Steril Cleaning	100 mg-0.14g Sterilize with
	Liquid, 250 ml size	Concentrate, clear liquid, non-oxid. Fully formulated for rapid drying and removes stain, spotless glasses & cutlery.	Scrub Dab Wash Dine	None	Wash on Washing	
	Liquid, 250 ml size	Especially effective against stains, ink, dyes, shades & proteins, stains, stains and white lines on the stainless steel watermarks.	Deep Clean	None	Steril Cleaning	
Glassware	Liquid, 2 x 250 ml	Concentrated glass cleaner. Dissolve in water any amount or alcohol which makes a ideal for all washable hard glass surfaces.	Glass			Non caustic with optical brightness
	Liquid, 250 ml size	Concentrate, clear liquid, non-oxid. Fully formulated for rapid drying and removes stain, spotless glasses & cutlery.	Scrub Dab Wash Dine	None	Wash on washing	Non caustic

Note: All cleansing agents as above are products of Johnson Diversey.

Abrasives

Abrasives are cleansing agents which are used on difficult stains that do not get dissolved with water and non-corrosive detergents. They usually consist of a rough coarsely ground substance with cleaning properties which accounts for friction on the soiled surface which results to cleaning.

Some examples of abrasives are

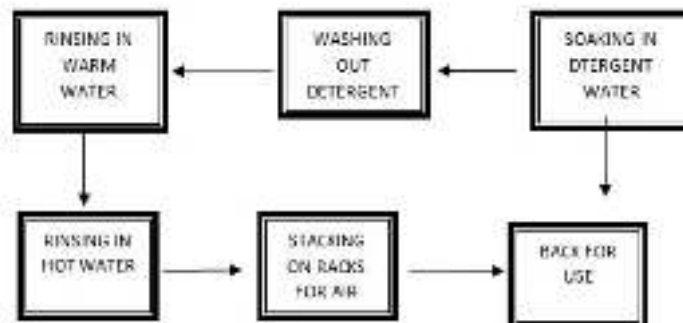
- a. Coal Ash
- b. Silver sand
- c. Pumice Powder
- d. Red brick powder + Tamarind – a good cleaner on brass surfaces
- e. Red brick powder + silver sand – good on obs nate stains.

Abrasives may also exist as scrubbers:

Nylon, glass wool, coconut thread, steel wool, etc.

The Dishwashing Process:

The Dish Washing Cycle



The diagram above shows the cleaning procedure of the crockery/earthen ware and the steps involved therein. It is suggested while drying that the

articles to be dried should be preferably dried by blowing hot air rather than wiping with cloth. The reason being the cloth can get wet soon and contaminate the surface of the washed dishes.

Glassware should follow the same sequence as for the crockery except that except that it can be emptied of remaining liquids and placed straight into the water with detergents.

For cooking utensils/metal wares, pre-soaking is necessary before scouring with hard brush and abrasive and then washing and rinsing and consequently dries for reuse. The cooking utensils get re-sanitized when placed on the source of heat for cooking, but nevertheless proper storage of tableware is important to prevent recontamination. A bacterial count up to 100 is acceptable, but when it exceeds that figure, it means washing, handling and storage needs attention.

Therefore, at every stage of production cycle occasional checks and collection of random samples is necessary to maintain necessary standard of hygiene & sanitation.

Various Dishwashing Systems:-

The wash up is carried out mainly in two methods:

- a) Manual Washing Method
- b) Machine Washing Method

The method to be adopted depends on various factors:-

- i) Available infrastructure:-

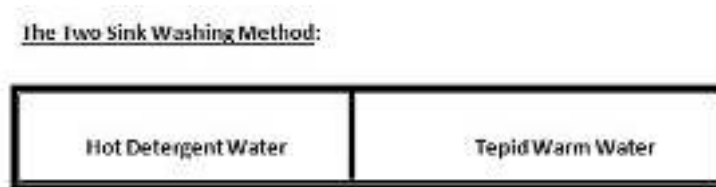
Mainly – space, water supply, waste water discharge system.

- ii) Financial status & Expenditure Budget made by the establishment.
- iii) Turnover of the outlet – rate of sale of covers.
- iv) The equipment inventory of the establishment.

- v) Manpower & staffing – number of personnel engaged, their skill and the layout of their duty roster.
- vi) The type of dishes, especially in case of ethnic ones, prepared. E.g. Indian dishes are greasier than the Continental. Hence dishwashing system must be responsive to the type of dishes that are being served/consumed. a) **Manual Washing Method**

The Manual Washing Method is carried out in sinks and can be performed in two three, four, and five sink washing method.

The various sink washing method their advantages and disadvantages are as below.



The first sink contains a hot water and soap solution, and the second sink contains tepid warm water. The stacked and grouped dirties come in their groups to the first sink and here they are manually scrubbed with the hot water detergent solution after which they are passed to the second sink where they are rinsed in tepid water. After which they are sterilized by hot steam and then wiped/dried and sent to the plate room and silver room accordingly.

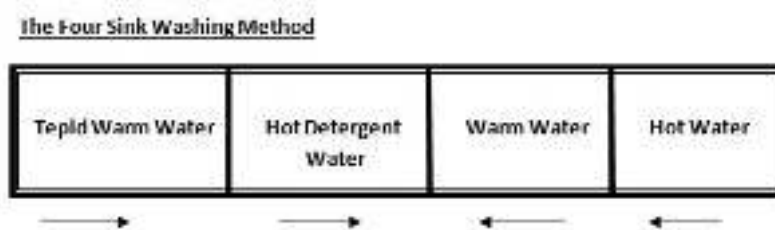
The two sink method is suitable where the rate of turnover of covers is slow and the space allotted for dishwashing is not so generous. The disadvantage of this system is the detergent requires to be changed very frequently.

The Three Sink Washing Method:

This can be performed in two ways:-

The **first method** is-

This system is practiced in a very busy outlet and also in centralized dishwashing unit managing multiple outlets and banquets. The greatest advantage of this system is the detergent do not get spoiled very easily as the grease is partially removed in the first sink itself.

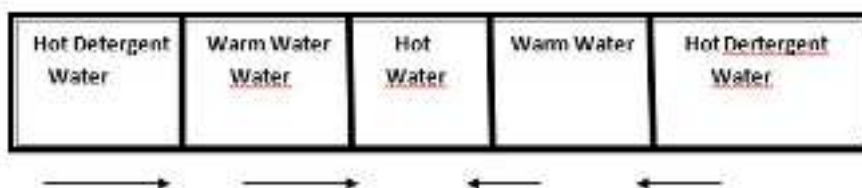


This method is a mixture of the two methods of three sink washing.

In this method the first sink contains tepid warm water, the second sink contains detergent solution in hot water and the third contains warm water, and the fourth one contains hot water. The stacked and grouped dirties come in their groups to the first sink and here they are manually scrubbed with the hot water solution. Here the grease gets dissolved. Thereafter the soiled articles are passed into the second sink where they are scrubbed in hot detergent solution. Next, they are dipped in the third sink containing warm water to wash out the detergents. Finally they go to the fourth chamber where it is ensured that neither detergent nor any adherents stick to the washed article. After which they are sterilized by hot steam and then wiped and sent to the plate room and silver room accordingly.

This method being a combination of the two systems, the advantage is the detergent need not be changed frequently while absolute cleaning is performed of both adherents and removal of any detergent, if there be any.

The Five Sink Washing Method



Here, the soiled articles from two sides are first dipped in hot water solution, where they are scrubbed and ensured that the adherents are removed. Then the articles are passed to the second sink where the detergent is washed from the article and finally they are put in hot water to ensure the article is absolutely clean. Thereafter, the articles are passed through steam and are sterilized.

This is actually a replica of the first method of two sink washing system. Here two types of equipment's can be washed simultaneously. If the manpower is adequate then this system is effective and as the final rinse is given in a common saves the consumption of water and since the same hot water can be used for washing two articles it also saves energy.

b) **Machine Washing Method:**

The second method is washing by dish washing machine. The machine itself is very expensive and should be maintained and operated strictly as per the instructions given in the manual. The plates and other earthenware are stacked and put in a wired basket, the metal wares are similarly stacked in a separate similar basket and so is the glassware. The machine is aided by a conveyor belt running through it. The baskets are loaded on the conveyor that takes them to the inner part where they are gyrated, sprayed with soap solution, and then rinsed, and depending upon the type of machine the articles can even be sterilized and dried as they come out from the other end of the machine.

The machine washing works on certain systems. They are:

i) **Semi- automatic:** The soiled articles are put in wired baskets and then manually loaded in to the first chamber of the machine. Here they are washed by sprayers of hot water. Then they are manually transferred to the second chamber where they are washed with detergents. And then finally they are manually transferred to the third chamber where they are washed with hot water sprays.

- ii) **Automatic:** These machines have a built in conveyor system. The soiled articles are loaded in wired basket and are placed manually into the first chamber. The timer is set to determine how long the articles are to be washed. Thereafter by the conveyor system the articles are transferred from one chamber to another after which finally they come out sterilized and dried.
- iii) **Flight Conveyor:** The wired baskets are fixed to the conveyor into which the articles are placed. The timer is set and upon switching on the machine the conveyor rolls the basket in, into the chambers where the soiled articles are washed rinsed, sterilized and dried automatically. Thereafter the basket comes out from which the washed articles are off loaded.

The Various Types of Dish Washer Machine:

- a) **Spray Type:** The dishes are placed in racks that slide into the machines, where they are subjected to a spray of hot detergent water at 48° to 60° Celsius from above and below. The racks then move on to the next section, where they are rinsed by fresh hot shower at 82° Celsius. At this temperature they are sterilized and on passing out into the air they dry off quickly.
- b) **Brush Type:** The machine has built in revolving brushes that are used for scrubbing of each article in hot detergent water; the articles are then rinsed and sterilized in another compartment.
- c) **Agitator type:** Baskets of soiled dishes are immersed in deep tanks and the cleaning is performed by mechanical agitation of hot detergent water. The loaded baskets are then given a sterilizing rinse in another compartment.

The guidelines for effective dish washing

- (a) All plate waste, leftovers, and swill should be collected should be collected away from the dishwashing area, in covered bins, for final disposal before utensils or crockery are stacked for washing.
- (b) All equipment's should not be collected to be washed at the end of the service. Dishwashing should be a continuous process to avoid areas which can become sources of contamination.

- (c) Free flowing water should be made available for this task.
- (d) Knives and other sharp tools should be kept on the drain board for washing, and never thrown into the sink, where staff may not expect them and thereby cutting their hands while washing.
- (e) Staff should be informed if a hot pan is placed on the drain board for washing.
- (f) All cooking pans must be soaked immediately after use to loosen adherents and decrease washing efforts.
- (g) Staff responsible for dishwashing should be equipped with non-slip gloves with good grip for the job, to protect hands from strong detergents, and the heat of the water, yet prevent breakages caused by slipping.
- (h) Handling of washed utensils should be minimized which in turn lessens the chances of contamination. This can be done if they are allowed to drain and air dry in the storage racks, to be removed only when required for use.
- (i) Dishwashing should never be rushed as this increase the health hazards for all- both staff and customers. To ensure this does not happen during rush hours, there should be adequate provision of crockery, cutlery and utensils.
- (j) All equipment's should be dry before it is put away.

The Layout of the Dishwashing area

- a) It must be so designed so that the work must be carried out easily without impeding any ones movement while the wash up is in operation.
- b) It should be done with minimum legwork, without causing any fatigue among the workmen.

- c) There should be enough equipment's and adequate supporting infrastructure matching with the volume of soiled articles generated at various POS.
- d) There must be a table for collection of waste plates with areas demarked for downloading soiled articles on it, logically arranged – the most fragile first and the unbreakable last.
- e) Bins for collecting waste must be provided with demarcation for biodegradable and non-biodegradable. Usually the bins for collecting biodegradable wastes are colored green and those for non-bio degradable are black,
- f) The wash up and the bins must be at safe distance to prevent contamination.
- g) There should be a defined area for collecting pots and pans, F&B Service Equipment's and a space for carrying out special silver cleaning.
- h) There must be separate trolleys for glassware, silverware and earthen ware, and for each there should be at least one for collecting soiled and one for collecting clean equipment's.
- i) The flooring must be smooth and should dry up as fast as possible, if there be any spillage of water.
- j) There must be clean draining boards for collection of washed articles adjacent to each sink.

Smaller items such as ashtrays, menu card holders, table numbers, cruet set, butter dishes are best stored in drawers lined with green baize.

The Considerations for the layout

While designing the wash up area a number of considerations must be kept in mind. The salient ones are

- l) It must be so designed so that the work must be carried out easily without impeding any ones movement while the wash up is in operation.
- m) It should be done with minimum legwork, without causing any fatigue among the workmen.
- n) There should be enough equipment's and adequate supporting infrastructure matching with the volume of soiled articles generated at various POS.

Therefore, keeping the above points in mind

- a) The wash up must be spacious and well- ventilated befitting the volume of soiled plates and dishes generated from the POS and the type of operation carried out by the dish washing section – manual or mechanized. There is no thumb-rule as such to the area required for the dishwashing area in relation to the size of the restaurant or the kitchen.

The space allotted would largely depend upon

- i. The type of service followed by the outlet. Pre-plated outlets would obviously generate less number of soiled equipment's than the outlets that operates on platter to plate service.
- ii. The rate of turnover per table.
- iii. The inventory of the F&B Service Equipment's put to use.
- iv. The availability of infrastructural requirements – method of supply of hot water, trolleys, dish washing equipment, sinks, etc.
- v. The skill of the washing staff

- vi. The equipment's put to use- their efficiency and size.
- b) The wash-up area must be located as near as possible to the POS.
 - c) There must be a demarked door for entry and exit.
 - d) Since the wash up area is a meeting place of two categories of personnel- the dish washing staff considered as the deliverer of the services and the servers and/or the kitchen brigade in short the receivers of the services. Therefore, the wash-up area should be so designed so that there is a demarked area for the movement of the two category of staff , viz. area for movement of the deliverers and area of movement of the receivers so that none of the above category comes into each other's way.
 - e) Again it is necessary to set the staff of the individual sections – receivers and the deliverers moving in a definite direction.
 - f) There should be ample of trolleys, large washing sinks/

Records Maintained

Log Book

- b) Duty Roster Chart
- c) Inventory of Service Equipment's
- d) Inventory of Kitchen Equipment's
- e) Inventory of Scraps generated
- f) Breakage & Condemned Register
- g) Machine Report Register
- h) LPG Consumption Register
- i) Maintenance Request Form
- j) AMC Records for Machines

k) Requisition Forms

The Formats of the above records as below:

Log Book

<p>Date:</p>	<p>Shift:</p>
<p>For Kind Attention:</p>	
<p>1.</p>	
<p>2.</p>	
<p>3.</p>	

TES

Inventory of Scraps

Name _____ of _____ the _____ Article

.....

Date	Opening Balance		Volume of Scrap Generated			Total		Sold		Sold To		Closing balance	
	Quantity	Amount	Quantity	Rate	Amount	Quantity	Amount	Quantity	Amount	Name	Order Dated, Invoice No. & Gate pass Details	Quantity	Amount

Breakage & Condemned Register

Date	Name of the Article	How Written Off		Details of Note Made in Stock Register	Nothing made by	Signature of F & B Manager
		Broken	Condemned			

Maintenance Request Form

XYZ Restaurant

Maintenance Request Form

Date _____ Day _____ Time _____

Department _____ Requested by _____

Location _____

Problem _____

Receiver of the Request _____

Date _____ Time _____

Duty Roster Chart

Week Code.....

Foe

Lunch/Dinner/Breakfast/afternoon Tea

Period from To.....

Name	Mon	Tue	Wed	Thu	Fri	Sat	Sun

Note (If any) pertaining to Change3 any individual staff's duty, banquet service. Etc.

Date_____

Signature_____

A MC R record for Equipment's

Name of the Machine & Machine Number	Date of AMC	Period of Validity	Expiry Date	Parts Covered Under AMC	Date of Visit by the Manufacturer/ Contractor	Replacement Made	Remarks

Requisition Forms

Requisition Slip

Department _____ Date: _____

Sl No. _____

Sl. No.	Ingredient	Quantity Requested	Quantity Issued	Cost		Per	Price	
				Rs.	P.		Rs.	P.

Machines/ Equipment's Used in Kitchen Stewarding Department

The equipment's put to use would vary greatly on the method of washing, waste collection and disposal followed by the establishment. The equipment's used should have the following criteria:

- That they themselves can be cleaned easily and can be readily inspected to see that it is clean. □ Hard - so that it does not absorb the food particles.
- Smooth – so that they can be cleaned easily.
- Resistant to rust
- Resistant to chipping

All establishments irrespective of following traditional methods or having a modernized would have

A	Brooms
B	Buckets
C	Brushes
D	Cloths
E	Duster
F	Dustbin
G	Dustbin powder
H	Floor cleaner
I	Mops
J	Fly Spray
K	Sponges
l	Oven Cleaner
M	Squeegee
O	Plastic Racks
P	Scrubbing Machine
N	Scouring Powder
Q	Wet Suction Cleaner
R	Soap
S	Dry Suction Cleaner
T	Steel Wool

U	Ammonia
V	Washing Powder
W	Disinfectant

Additional equipment's may be incorporated in a modernized set up:

A) Electrical Fly Incarnate: These are electrically heated coils with a blue ray to which flies are attracted. As soon as they reach the coil they get immolated and are killed.

B) Food Waste Disposers: These machines are electrically operated and take all manner of rubbish, including bones, fats, scraps and vegetable refuse. The contents when taken into the disposers they are swilled, finely ground, rinsed with a spray of water and drained. While operating such units care must be taken to see

1. Rags and tines are not disposed through this system.
2. Articles put inside should not be pushed into the machine with the help of metal objects.
3. The disposed rubbish coming from food dispensers are treated effectively so that they are environmentally safe.

C) Incarnate: It is a device by which waste is burnt & converted to ash and is properly disposed.

D) Compacter: A device by which scraps, like tins, bottles, etc., generated are converted into blocks by means of immense pressure. This results in ease of storage.

E) Conveyor System: An automated delivery and transportation systems that eliminates the need of excess manpower and also reduces work fatigue.

F) Effluent Treatment Plant: A plant where the entire waste water generated by the organization is treated and made environmentally safe before being discharged into the public sewer.

The waste generated is divided into food waste and other waste. Then each is segregated into bio-degradable and non-bio degradable waste.

The non-bio degradable waste is initially stored at a demarked area and disposed according to the governmental regulations. Some non-bio degradable generated in kitchen may include and discharged as

Follows:-

i) Plastic disposables are usually sold to contracted vendors for recycling **ii) Tins/ Glass bottles** are passed through compacters and then sold to contracted vendors. **iii) Burnt oil** from frying is disposed to vendors and is used for various industrial purposes.

iv) Starch generated from cooking rice etc. are passed through the ETP and made safe for discharge into the public waste water discharge.

The bio degradable waste can be disposed in number of ways:

- a) Given away to piggery as food.
- b) Used as manure
- c) Used as landfill
- d) Discharged into public sewerage after being treated in the ETP system.