In R you can add extra library locations (directories where your packages are installed) with the `.libPaths()` function. For example, to add "`~/my/lib`", you can do

```
libs <- c("~/my/lib", .libPaths())
libPaths(new = libs)
```

If you want to set library locations for all workers in a cluster using the parallel package, the intuitive way of doing this is as follows.

```
libs <- c("~/my/lib", .libPaths())
cluster <- parallel::makeCluster(2)
clusterCall(cluster, .libPaths, new=libs)
```

However, **this does not** work. I have not spent any time figuring out why, but presumably the side effect caused by `.libPaths()` is sent to the wrong place. Here are the internals of `.libPaths()`.

```
> .libPaths
function (new)
{
    if (!missing(new)) {
        new <- Sys.glob(path.expand(new))
        paths <- c(new, .Library.site, .Library)
        paths <- paths[dir.exists(paths)]
        .lib.loc <<- unique(normalizePath(paths, "/"))
    }
    else .lib.loc
}
```

The side effect is where `.lib.loc` is altered.

In any case, the following approach does work. We export the `libs` variable to the workers and then set `libPaths()` using `clusterEvalQ()`.

```
e <- new.env()
e$libs <- c("~/my/lib", .libPaths())

cluster <- makeCluster(2)
clusterExport(cluster, "libs", envir=e)
clusterEvalQ(cluster, .libPaths(libs))…
```