Enjoy!!

A list of root and its underlying representation

sg	underlying representation
daar	daar
gees	gees
laf	laf
lug	lug
naag	naag
tib	tib
sab	sab
bad	bad
d͡ʒid	d͡ʒid
feeɖ	feeɖ
ʕiir	ʕiir
ʔul	ʔul
bil	bil
meel	meel
kaliil	kaliil
najl	najl
sun	sum
laan	laam
sin	sim
dan	dan
daan	daan
saan	saan
nirig	nirg
gaβaɖ	gabɖ
hoɣol	hogl
baɣal	bagl
waħar	waħar
irbad	irbad
kefed	kefed
d͡ʒilin	d͡ʒilin

bohol	bohol
jirid	jird
ʔaajad	ʔaajad
gaʕan	gaʕm
ʔinan	ʔinan

suɣaj	sug
kaβaj	kab
siðaj	sid
dilaj	dil
ganaj	gan
tumaj	tum
argaj	arg
gudbaj	gudb
qoslaj	qosl
hadlaj	hadl

suffix	underlaying representation	Notes	Notes
-ta	-ta	sg.def	
-[d/ɗ]a	-ta	sg.def	
-ʃa	-ta	sg.def	
-o	-o	pl	
-Vɣo	-o	pl	V represents vowel
-Vβo	-o	pl	
-Vðo	-o	pl	
-Vʐo	-o	pl	
-aj	-aj	3sg.masc	
-taj	-taj	3sg.fem	
-ʃaj	-taj	3sg.fem	
-daj	-taj	3sg.fem	
-naj	-naj	1pl.past	
-laj	-naj	1pl.past	

How to run the program:
foma -l somali.foma
You will see all the test cases results too. Top 20 are from Underlying to Surface (one to one mapping) and everything else are from Surface to Underlying (More than 20 since we have one to many mapping)

List of test cases
Underlying --> Surface
apply down gaʕmta
apply down laamta
apply down laamo
apply down simo
apply down d͡ʒid
apply down bagl
apply down jirdta
apply down kefedta
apply down boholta
apply down baɣalta
apply down naago
apply down ʔulta
apply down hadaltaj
apply down sabo
apply down feeɖo
apply down gabɖta
apply down sugaj
apply down sidtaj
apply down irbadta
apply down qosoltaj
Surface --> Underlying
apply up gaʕanta
apply up laanta
apply up laamo
apply up simo
apply up d͡ʒid
apply up baɣal
apply up jirida
apply up kefeda
apply up bohoʃa
apply up baɣaʃa
apply up naaɣo
apply up ʔuʃa
apply up haðaʃaj
apply up saβo

apply up feeʐo
apply up ɡaβaɖa
apply up suɣaj
apply up sidaj
apply up irbada
apply up qosoʃaj